

KINDERGARTEN



Pennsylvania Learning Standards for Early Childhood



OFFICE OF CHILD DEVELOPMENT
AND EARLY LEARNING
PENNSYLVANIA DEPARTMENT OF EDUCATION
AND DEPARTMENT OF PUBLIC WELFARE

2009
REVISED

TABLE OF CONTENTS

Introduction.....	2
The Learning Standards for Early Childhood Format.....	5
Guiding Principles	6



**KEY LEARNING AREA:
APPROACHES TO LEARNING THROUGH
PLAY: CONSTRUCTING, ORGANIZING AND
APPLYING KNOWLEDGE.....7**

Standard 15.1: Constructing Knowledge	8
Standard 15.2: Organizing and Understanding Knowledge.....	9
Standard 15.3: Applying Knowledge.....	10
Standard 15.4: Learning Through Experience	10
Approaches to Learning Through Play Glossary	12



**KEY LEARNING AREA:
CREATIVE THINKING AND EXPRESSION:
COMMUNICATING THROUGH THE ARTS.....13**

Standard 9.1: Production and Performance	
9.1a: Music and Movement	14
9.1b: Dramatic and Performance Play.....	15
9.1c: Visual Arts	15
Standard 9.2: Historical and Cultural Context of Works in the Arts ..	16
Standard 9.3: Critical Response to Works in the Arts	17
Standard 9.4: Aesthetic Response to Works in the Arts	17
Creative Thinking and Expression Glossary	18



**KEY LEARNING AREA:
COGNITIVE THINKING AND
GENERAL KNOWLEDGE.....19**



**KEY LEARNING AREA:
MATHEMATICAL THINKING AND
EXPRESSION: EXPLORING, PROCESSING
AND PROBLEM SOLVING.....20**

Standard 2.1: Numbers, Number Systems and Relationships	21
Standard 2.2: Computation and Estimation	22
Standard 2.3: Measurement and Estimation.....	24
Standard 2.4: Mathematical Reasoning and Connections ...	25
Standard 2.5: Mathematical Problem Solving and Communication	26
Standard 2.6: Statistics and Data Analysis	27
Standard 2.7: Probability and Predictions	28
Standard 2.8: Algebra and Functions	29
Standard 2.9: Geometry.....	30
Standard 2.11: Calculus.....	31
Mathematical Thinking and Expression Glossary.....	32



**KEY LEARNING AREA:
SCIENTIFIC THINKING AND TECHNOLOGY:
EXPLORING, INQUIRY AND DISCOVERY 33**

Biological Sciences

Standard 3.1a: Living and Non-Living Organisms	34
Standard 3.1b: Genetics	35
Standard 3.1c: Evolution	36
Standard 3.2a: Physical Sciences: Chemistry.....	37
Standard 3.2b: Physical Sciences: Physics.....	38
Standard 3.3a: Earth and Space Sciences: Earth Structure, Processes and Cycles	39
Standard 3.3b: Origin and Evolution of the Universe	41
Standard 3.4a: Scope of Technology	41
Standard 3.4c: Technology and Engineering Design	42
Standard 3.4d: Abilities for a Technological World.....	42
Standard 3.4e: The Design World	43

Environment and Ecology

Standard 4.1: Watersheds and Wetlands.....	44
Standard 4.2: Renewable and Non-Renewable Resources ..	44
Standard 4.3: Environmental Health.....	44
Standard 4.4: Agriculture and Society	44
Standard 4.6: Ecosystems and Their Interactions	45
Standard 4.7: Threatened, Endangered and Extinct Species ..	45
Standard 4.8: Human and the Environment	45
Standard 4.9: Environmental Laws and Regulations	45
Scientific Thinking and Technology Glossary.....	46



**KEY LEARNING AREA:
SOCIAL STUDIES THINKING:
CONNECTING TO COMMUNITIES.....47**

Standard 5.1: Principles and Documents of Government ...	48
Standard 5.2: Rights and Responsibilities of Citizens	48
Standard 5.3: How Government Works	49
Standard 6.1: Economic Systems.....	50
Standard 6.2: Markets and the Functions of Government ...	50
Standard 6.3: Scarcity and Choice.....	51
Standard 6.4: Economic Interdependence	52
Standard 6.5: Work and Earnings.....	52
Standard 7.1: Basic Geographic Literacy.....	53
Standard 7.2: Physical Characteristics of Places and Regions ..	53
Standard 7.3: Human Characteristics of Places and Regions ..	54
Standard 7.4: Interactions Between People and the Environment ..	54
Standard 8.1: Historical Analysis and Skills Development... ..	55
Social Studies Thinking Glossary.....	56



**KEY LEARNING AREA:
HEALTH, WELLNESS AND PHYSICAL
DEVELOPMENT: LEARNING ABOUT
MY BODY.....57**

Standard 10.1–3: Health and Safety Practices..... 58
Standard 10.4: Physical Activity: Gross Motor Coordination..... 60
Standard 10.5: Concepts, Principles and Strategies of Movement:
 Fine Motor Coordination..... 61
Health, Wellness and Physical Development Glossary 62



**KEY LEARNING AREA:
PARTNERSHIPS FOR LEARNING:
FAMILIES, LEARNING ENVIRONMENTS AND
COMMUNITIES73**

Standard 20.1: Connections 74
Standard 20.2: Family Engagement..... 76
Standard 20.3: Supporting Children's Learning 77
Standard 20.4: Transition 79



**KEY LEARNING AREA:
SOCIAL AND EMOTIONAL DEVELOPMENT:
LEARNING ABOUT MYSELF AND OTHERS.... 81**

Standard 25.1: Self Concept (Identity)..... 82
Standard 25.2: Self Regulation 83
Standard 25.3: Pro-Social Relationships with Adults..... 84
Standard 25.4: Pro-Social Relationships with Peers 85

Resources 86

Acknowledgements..... 88



**KEY LEARNING AREA:
LANGUAGE AND LITERACY DEVELOPMENT:
EARLY LITERACY FOUNDATIONS, READING,
WRITING, SPEAKING AND LISTENING 63**

Standard 1.1: Learning to Read Independently..... 64
Standard 1.2: Reading, Analyzing, and Interpreting Text 66
Standard 1.3: Reading, Analyzing, and Interpreting Literature..... 67
Standard 1.4: Types of Writing 68
Standard 1.5: Quality of Writing 68
Standard 1.6: Speaking and Listening 69
Standard 1.7: Characteristics and Function of the
 English Language 70
Standard 1.8: Research..... 71
Standard 1.9: Information, Communication, and
 Technology Literacy 71
Language and Literacy Development Glossary..... 72



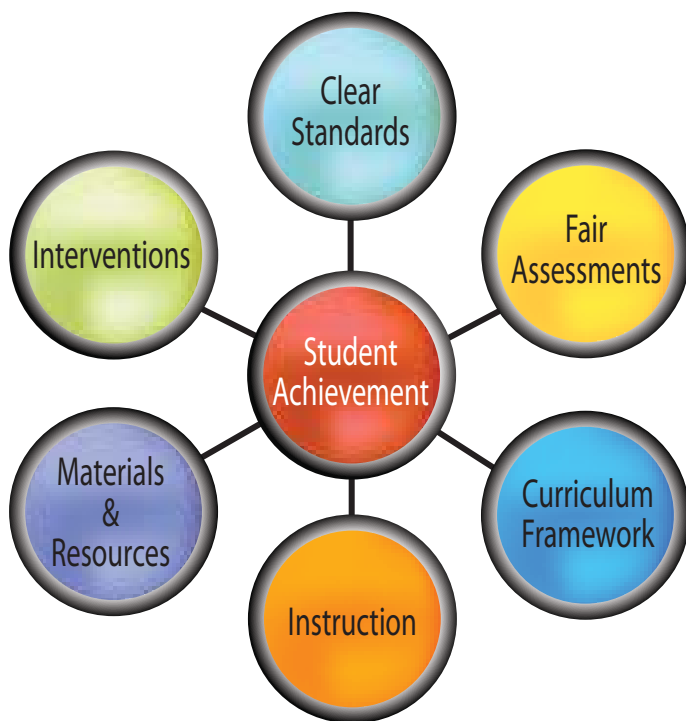
INTRODUCTION

Children are born with an incredible capacity and desire to learn. Over 30 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential, then, that students' first school experiences are robust ones, steeped in expectations that develop critical thinking and problem solving skills, a deep understanding about themselves in a social society and age appropriate content.

Teachers' instructional practices must embed the domains of development: cognitive, social-emotional, language, and physical within the foundations or approaches to learning that enable children to explore, understand and reach beyond the "here and now" to challenge themselves and to experiment and transform information into meaningful content and skills.

Teachers of very young children have the awesome task of providing rich information and experiences that build skills and understanding in the context of every day routines *and* within intentionally-designed play opportunities that capture children's interests, wonder and curiosity so they want to know more. Pennsylvania's learning standards join hand-in-hand with the learning environment; the responsive relationships that have been built with children, families and the community; the age, cultural and linguistically-appropriate curriculum; and the practices being used to assess children, classrooms and programs to create the best possible experiences for learning success.

The Department of Education and the Office of Child Development and Early Learning utilize a Standards Aligned System (SAS) that links the elements of instruction, materials and resources, curriculum framework, fair assessment and interventions, and learning standards to children's engagement in learning and their school success.



1. MATERIALS AND RESOURCES

Every early learning classroom, whether it is in a home atmosphere or center-based setting, must be a comfortable, safe and nurturing environment where children can play with blocks, manipulatives, art materials, and dramatic play items to enhance skill development. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by teachers who intentionally design activities that

engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others and how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.

School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed classrooms demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive and language learning.

Classroom assessment instruments that help providers assess the arrangement of indoor and outdoor space, the provision of materials and activities, and their development of class schedules are useful in assuring best practice implementation and alignment to Pennsylvania's Learning Standards for early childhood.



2. INSTRUCTION

Instruction in the early years often looks different than in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery and in experimentation and interaction with materials, their peers and nurturing adults.

Teachers help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. A limited amount of direct teaching combined with child-initiated play produce optimal conditions for young children's education. Teachers become facilitators or guides of learning who interact with children throughout the school day. They ask open-ended questions that encourage children to think about what comes next or want to know more and they support children's creativity, problem solving, intuition and inventiveness (approaches to learning) by challenging and encouraging them. Teachers design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities and culture.

3. CURRICULUM FRAMEWORK

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, vocabulary, concepts and competencies that further define the learning standards.

4. FAIR ASSESSMENTS

Teachers must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing in the classroom allow teachers to make adaptations or adjustments in the individualized learning plans for every child.

Early childhood professionals observe and assess children in their classroom setting using the materials that are found in their school environment. Blocks that children count or stack, for example, provide the information teachers need to understand children's math or fine motor skills. Outdoor play or recess allows the adult to observe children's gross motor skills or the social interactions with peers.

Teachers must use the information they have documented during observation, along with information from the parent, to identify goals and next steps for children's learning through play.

5. CLEAR STANDARDS

Learning Standards provide the framework for learning. They provide the foundational information for what children should know and be able to do. Pennsylvania's learning standards build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, gradually getting more difficult as it extends through high school.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Keystone STARS, PA Pre-K Counts, ABG, HSSAP all use similar sets of standards that provide guidance on program operation that exhibits best practices.

6. INTERVENTIONS

When teachers are observant and assess children's abilities, interests and achievement using the standards as a guide, interventions become part of the teachers' everyday practice. Revising activities, adjusting lesson plans and accommodating children's individual differences becomes matter-of-fact and the norm. Successful strategies that allow children to master skills at his or her own pace provide benefits for all children as they interact with others of varying abilities and cultures.

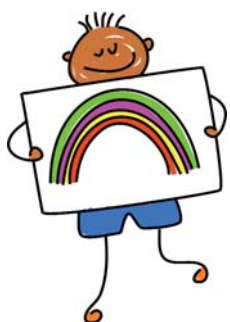
Early Childhood Special Education

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experiences alongside their typically developing peers. Teachers may need to adapt or modify the classroom environment, teacher interactions and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards does not need to be specific to an age, grade or specific functional level, but instead provide the breadth of information from which to create goals and experiences for children that will help them reach their highest potential while capturing their interests and building on what they already know. Teachers must emphasize and celebrate all children's accomplishments and focus on what all children can do.

English Language Learners

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. The skills needed for young English language learners to become proficient in English are fully embedded in the Pennsylvania's Standards for Early Childhood.



EARLY CHILDHOOD CONNECTIONS

High quality early learning programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early learning programs, school districts and grades within districts create strong partnerships for success.

1. CONNECTIONS TO CHILDREN

Relationships are the key to successful connections between a teacher and the students. Teachers must take time to know every child, to understand the way in which they learn best, to identify the special talents and skills each child possesses and the interests that excite them to learn more. Adults who work with young children must be students themselves as they learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning and experiences into new achievements and acquisition of knowledge.

2. CONNECTIONS TO FAMILIES

Parents of young children have much to offer in the learning process. When a partnership is formed between teacher (or school) and the family, the connection between home and school has been strengthened, assuring that children receive consistent messages about learning and skill development. Parents should be given opportunities to learn about their children's day at school, to provide input into the information they want children to learn and master, and to understand what they can do at home to enhance the school experience. Frequent informal conversations, invitations to participate in classroom life and voluntary take-home activities that relate to school experiences help to build the partnership.

At-home resources for parents such as *Kindergarten, Here I Come*, *Kindergarten, Here I Am* or *Learning is Everywhere* provide both teachers and families with tools to connect at home and school learning and to share age appropriate expectations and activities that support that connection.

Families' ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Staff must embrace all children's heritages and provide activities, materials and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others'. Staff in high quality early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

3. CONNECTIONS WITH OTHER EARLY LEARNING PROGRAMS

Children and families often have other needs and priorities in addition to participation in high quality early childhood learning programs. Families may need to coordinate their early learning program services with child care, health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their early intervention provider assure linkages that support children's school readiness and ongoing success.

4. CONNECTIONS FOR LEARNING

Young children make learning connections through play. Providers that allow children time to explore and discover, both inside and outside, have optimized children's capacity to internalize and generalize content by making their own connections to prior-learned knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play.

Adults must also use literature connections in all domains. Literature supports both content and social and cultural learning. It is a foundation for curriculum integration.

CONTINUED...

LEARNING STANDARDS TASK FORCE

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Public Welfare as part of Governor Rendell's commitment to early childhood education. The Office of Child Development and Early Learning, established in 2006 to administer both Departments' early childhood programs, has overseen revisions to the standards.

Each set of Standards has been formulated with help and guidance from practitioners who represent early childhood programs and advocacy groups, higher education, and policy analysts and researchers. Support for the development of the Standards was provided through the national Build Initiative, a multi-state partnership that helps states construct a coordinated system of programs and policies that respond to the needs of all young children.

THE LEARNING STANDARDS CONTINUUM

Within all of Pennsylvania's Early Childhood Standards, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social-emotional development, language and literacy development, physical or motor development, creative expression and the cognitive areas of mathematics, science and social studies. The Standards within each Key Learning Area provide the information that children should be able to know and/or do when they leave the age level or grade. The Standards are also organized by Standard Statements that specify specific skills. New, in 2009, strands further define the standards by organizing the information into focus areas. The strands become the connections to the Academic Standards for grades 3–12. They, too, use these strands to organize the content that all children in Pennsylvania should be able to know and do.

PENNSYLVANIA'S EARLY CHILDHOOD CONTINUUM OF STANDARDS

Infant-toddler, Pre-kindergarten and Kindergarten standards are connected through the Continuum of Learning and further linked to the 3rd grade academic standards. Using the strands as the organizer, professionals are able to look across ages and grades to understand how children's development emerges. Some skills will not emerge in a noticeable way until a child is older. These standards statements will be identified on the continuum as "emerging". For example, concepts about money are not ones that infant teachers need to develop. They show in the social studies standards for infants as "emerging". Strands that are missing numerically are skills that do not need attention during the Early Childhood Education years.

Teachers who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.



LEARNING STANDARDS FOR EARLY CHILDHOOD DO:

- Inform teachers and administrators about curriculum and assessment and guide the selection of program materials and the design of instruction
- Inform parents of age-appropriate expectations for children
- Provide a common framework for community-based work on curriculum and transitions

THE LEARNING STANDARDS FOR EARLY CHILDHOOD ARE NOT USED:

- As a specific curriculum or to mandate specific teaching practices and materials
- To prohibit children from moving from one grade or age level to another
- To assess the competence of children or teachers

AGE GROUPINGS IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

INFANT-TODDLER LEARNING STANDARDS

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months – 27 months) and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 – 27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an infant-toddler continuum with the content within one strand presented together on one page. Practitioners can look across each age level to determine the skills that best match their children's current development, identifying additional standard statements, examples and supportive practices to scaffold children's learning.

When strands include "Emerging" under infant or young toddler, these concepts are beginning to emerge but are expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

LEARNING STANDARDS FOR PRE-KINDERGARTEN

Teachers will find the skills that pre-kindergarteners (ages three and four) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency in many of them. Classroom environments, materials and activities that are developed for this age will be appropriate for both three and four year olds; expectations for mastery will be different.

LEARNING STANDARDS FOR KINDERGARTEN

Students who complete kindergarten should demonstrate mastery of many of the skills within the Kindergarten Standards. This document is designed for full day kindergarten classrooms. Half day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-directed instruction should be predominant with language and literacy and math infused through the day in addition to their special focus learning times. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills and their creative expression within the course of a kindergarten day.

THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT

CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS

Key Learning Area: The domains of learning that assure child's holistic development.

Standard: Organizes the content within Key Learning Areas into smaller specific topics.

STANDARD CTE 9.1.A: PRODUCTION, PERFORMANCE AND EXHIBITION: MUSIC AND MOVEMENT

BIG IDEA

Music can be used to express and initiate aesthetic and physical responses

ESSENTIAL QUESTIONS: How do I respond to music through my expressions? How do I respond to music by moving my body?

Big Idea: Describes the primary information that children should acquire across all age levels.

Essential Questions: Linked to the Big Ideas and provide the questions that support children's inquiry.

Numbering: Links to 3rd Grade Academic Standards. See below for further description.

Strand: Areas of learning within each Standard that organize the information. These strands are similar from birth through grade 12.

9.1.a.1 AESTHETIC RESPONSE		
STANDARD STATEMENT <ul style="list-style-type: none"> Respond to different forms of music and dance and use basic vocabulary when describing action Identify and reproduce patterns of rhythm in music and dance 	EXEMPLARS (EXAMPLES) <p>The learner will:</p> <ul style="list-style-type: none"> Understand and use music vocabulary Discuss music and movement using appropriate vocabulary: fast/slow (tempo); high/low (pitch); short/long (duration); soft/loud (volume); strong/weak beat (rhythm) Sing and play instruments loudly and softly Keep rhythm to a song or poem using body movements or instruments Identify the rhythm of a known song and clap the pattern as the song is sung Copy rhythms modeled by the teacher 	SUPPORTIVE PRACTICES <p>The adult will:</p> <ul style="list-style-type: none"> Demonstrate singing and sources of sound, tempo, rhythm Use and model appropriate music and movement vocabulary when teaching Model and describe patterns and sequences used in dances Relate patterns in dance to patterns in mathematics Provide opportunities for learners to watch and discuss presentations or videos of music and movement Share a song or poem: have children clap the rhythm

Standard Statement: The specific indicators that provide the skills for children to learn and master. In the younger years when a skill is still emerging, this area will be identified as "emerging". In some strands, there will be several standard statements; in others, there will be just one.

Examples: Or competencies identify ways children may demonstrate mastery or skill development.

Supportive Practices: Define strategies and materials professionals can use to help children learn or progress.

GUIDING PRINCIPLES

High quality early childhood programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills, and concepts children need to make progress socially and academically. High quality early childhood programs maintain high developmentally achievable expectations for all children using clear performance standards with a continuous cycle of assessment understood and used by staff, children, and parents.



High quality early childhood education and care programs have a significant impact on children's future successes.



All children can learn and deserve high expectations that are age, individually, and culturally appropriate.**



Young children learn best when they are able to construct knowledge through meaningful play, active exploration of the environment and thoughtfully planned activities.



The learning environment for young children should stimulate and engage their curiosity of the world around them, and meet their physical needs and emotional needs so that children feel safe and secure.



Language and early literacy development must be supported and integrated throughout all aspects of early childhood care and education programs.



Children's learning, development and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development, and are intentional in their relationships and work with children and families.



Early childhood care and education programs must address the individual needs of a diverse population of children, e.g., children with special needs, children from diverse cultural backgrounds, children from all social-economic groups.



Early childhood care and education programs are defined by a set of comprehensive standards that maximize a child's growth and development across domains.



There must be a system of research based assessment that documents children's growth and development in relationship to a defined set of standards, and is used to inform instruction.



Children's learning is enhanced when families, schools, and communities work together.

**Footnote: Young children with disabilities will meet standards consistent with their individualized education programs (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Education Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990).

APPROACHES TO LEARNING THROUGH PLAY

CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE



Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help students feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment, and enhancing their curiosity and knowledge about the world in which they live.

FAMILY RELATIONSHIPS



There is no greater gift for children's successful endeavors in school than for schools to create a strong relationship between home and school. The connections that teachers and schools form with parents and guardians, especially in the early childhood years, provide the link for learning and assures that children, teachers and families work together to support children's growth and development and skill mastery. Families can be invited to participate in many ways – volunteerism, donations of time, resources and materials, shared decision-making about children's educational goals, support and referrals – but the key is a reciprocal relationship that invites parent input about a child's school performance and information about the values and home culture, while sharing details of the child's school routine and perceived successes and challenges in the classroom. Parents who perceive themselves as an integral member of the learning team are more likely to provide ongoing support and encouragement for children's learning that will carry them through high school.



Standard	Page
15.1 Constructing Knowledge	8
15.2 Organizing and Understanding Knowledge	9
15.3 Applying Knowledge	10
15.4 Learning Through Experience	10

STANDARD 15.1: GATHERING AND CONSTRUCTING KNOWLEDGE

BIG IDEA: Children actively construct knowledge through routines, play, practice and language. They observe others and their environment, use their senses to manipulate objects and materials and develop their own individualized approach to learning.

ESSENTIAL QUESTIONS: How do I find out about things? What information do I need to learn new ideas? What do I learn while I am playing?

5.1.1 CURIOSITY AND INITIATIVE

STANDARD STATEMENT

- Demonstrate an eagerness to discover and discuss a growing range of topics, ideas and tasks
- Ask questions and seek meaningful information about a topic or idea
- Show interest and ask questions about others' work or stories
- Use play to demonstrate new skills and knowledge
- Explore technological equipment and materials with interest

EXEMPLARS (EXAMPLES)

The learner will:

- Share ideas and interests with teacher
- Ask "how" or "what" questions
- Predict story endings or ask questions about a story
- Use vocabulary words or concepts learned in class during play
- Try a new computer game or use a CD player that has been added to the reading corner

SUPPORTIVE PRACTICES

The adult will:

- Encourage children to discuss and learn more about their interests
- Introduce a book by asking, "What do you think this book might be about?"
- Ask children to guess what might be inside a box or bag as a way to introduce a topic or idea
- Provide real objects that can be manipulated or explored to help understand a concept
- Respond to children's questions with explanations that help them understand
- Encourage children to research answers to questions through books, such as "Let's find a book about dogs to see why their noses are cold."
- Regularly rotate classroom materials and formally introduce new objects and activities into the classroom by showing excitement, "look what I brought for us to do today?"

15.1.2 RISK TAKING

STANDARD STATEMENT

- Demonstrate a willingness to participate in an increasing variety of diverse experiences
- Determine appropriate method for learning information in a specific situation



EXEMPLARS (EXAMPLES)

The learner will:

- Participate in experiments, cooking experiences or field trips
- Use books, ask questions or use materials to find out more about a topic

SUPPORTIVE PRACTICES

The adult will:

- Introduce new materials and activities by explaining what they are and providing instructions on their use
- Rotate materials in the classroom, pairing new and familiar things for children's comfort
- Demonstrate enthusiasm when introducing new materials
- Provide experiments, field trips and other experiences to expand children's learning
- Support and encourage children's independent exploration of a topic

15.1.3 STAGES OF PLAY

STANDARD STATEMENT

- Engage in simple games with rules with the ability to plan ahead to develop strategies
- Engage in elaborate interactive play sequences that include acting out rules and negotiating play themes

EXEMPLARS (EXAMPLES)

The learner will:

- Play kickball, Four Square, Checkers or Go Fish
- Use materials and props to support an ongoing play experience such as a safari adventure

SUPPORTIVE PRACTICES

The adult will:

- Encourage children to play board games and group games
- Provide support while children are learning games
- Provide props and materials to support play experiences

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION

BIG IDEA: Children learn to organize complex information and thoughts into small steps and goals. They develop plans for completing tasks by establishing goals and carrying out plans to meet those goals.

ESSENTIAL QUESTIONS: How do I understand the steps of a task? How do I decide how to approach a task?

15.2.1 ENGAGEMENT, ATTENTION AND PERSISTENCE

STANDARD STATEMENT

- Pay attention to adult who is providing instructions and follow through on directions
- Demonstrate capacity to concentrate over time on task, despite interruptions or classroom disruptions
- Complete simple activities or tasks from beginning to end with independence
- Work or interact with a specific toy or object until complete

EXEMPLARS (EXAMPLES)

The learner will:

- Follow two or three step directions such as get a book, choose a partner and find a space to partner read
- Work on a project or engage in a play experience while others are doing other activities
- Complete a classroom job such as watering the plants without adult assistance
- Complete a 24 piece puzzle

SUPPORTIVE PRACTICES

The adult will:

- Give clear and simple directions or explanations
- Allow time for children to follow simple directions to complete a task
- Save children's work for later completion if transition to a new activity is necessary
- Show flexibility during transitions to allow children who are working on an project time to complete it
- Offer help to children who are demonstrating difficulty completing a task or activity
- Praise children's efforts to complete a project
- Minimize interruptions and disruptions for children who are concentrating on a specific task or activity

15.2.2 TASK ANALYSIS

STANDARD STATEMENT

- Classify, contrast and compare objects, events and experiences
- Complete multi-step tasks with independence

EXEMPLARS (EXAMPLES)

The learner will:

- Use comparison of daily experiences or favorite activities to learn more about a topic
- Gather materials, place in backpack, put on coat, and put chair up on desk before lining up at the end of the day

SUPPORTIVE PRACTICES

The adult will:

- Provide multiple types of materials that require use of classification skills such as blocks that can be sorted by size, shape, or color
- Use story picture cards that children can put in sequential order
- Ask children to describe the steps required to complete a certain task

15.2.4 REASONING AND PROBLEM SOLVING

STANDARD STATEMENT

- Explore a new way to continue with a task, project or experience after initially experiencing a failure



EXEMPLARS (EXAMPLES)

The learner will:

- Determine why the block tower fell over and experiment with alternate ways to build it so that it remains standing

SUPPORTIVE PRACTICES

The adult will:

- Ask "why do you think" or "how can we" questions to help children discover alternate ways to approach a task, i.e. "why do you think the tower fell over when you put the big block on top?"

STANDARD 15.3: APPLYING KNOWLEDGE

BIG IDEA: Children extend their understanding when they think creatively about new ideas in the context of past experiences and knowledge.

ESSENTIAL QUESTIONS: How do I relate new information to things I already know? How do I use what I already know to learn new things? How do I finish a task?

15.3.1 CREATIVITY, FLEXIBILITY AND INVENTION

STANDARD STATEMENT

- Observe and imitate both adults and peers to gain understanding of specific tasks and skills
- Create an object to serve a functional purpose
- Combine unique materials to make a new (real or pretend) object or result

EXEMPLARS (EXAMPLES)

The learner will:

- Combine different types of materials to represent a scenario or situation such as using legos, unit blocks and wood signs to make a neighborhood with roads, houses and people
- Use a toilet paper tube as a kazoo humming into it to make noise
- Try a new role in the dramatic play area that is suggested by another child
- Use a block as a truck or a large box to act as a fort

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for children to give input into the daily schedule when changes are needed
- Offer varied opportunities for children to work with materials to create projects that demonstrate learned skills
- Provide a diverse set of materials that can be combined to create an end product
- Use the Project Approach as a way for children demonstrate learned skills across Key Areas of Learning
- Use "What If" scenarios that require children's creative thinking and problem solving
- Incorporate creative play scenarios within content instruction such as, pretend to buy a train ticket to go to the beach – discuss cost, preparations for trip, what you'll see when you get there, etc.

STANDARD 15.4: LEARNING THROUGH EXPERIENCE

BIG IDEA: Each child's biological make-up, family, history and learning style provide the important context in which learning is constructed.

ESSENTIAL QUESTIONS: How do my home experiences help me learn? How do I learn how to cope with difficult situations?

15.4.1 HOME-SCHOOL IDENTITY

STANDARD STATEMENT

- Use home experiences to learn new knowledge
- Transfer information from home to school and from school to home
- Develop attitudes and values about the way s/he learns to understand new experiences
- Understand how information learned in other settings impacts school learning
- Understand the difference between school and home processes

EXEMPLARS (EXAMPLES)

The learner will:

- Ask for additional help to master a skill or task that was begun at home such as writing his/her name
- Share notes with teacher and parent back and forth
- Show pleasure about learning something new when a parent is also pleased
- Tell about a song that was learned at piano lessons
- Ask parents to continue school activities when they get home, such as "Can we read this book when we get home?"

SUPPORTIVE PRACTICES

The adult will:

- Provide families with regular updates about the events that are occurring in school including songs, stories, special events, etc.
- Talk with families about what children are working on at home and incorporate those goals in the school day, such as helping a child who is learning to go to sleep on own at home by helping them lay down for nap independently at school
- Ask children to describe the extra curricular activities they participate in and show what they are learning
- Provide "take home" activity kits that can travel back and forth to school and home
- Acknowledge and value differences in class and home structure, such as, "at school we leave our shoes on during the day – I know you like to go barefoot at home"

STANDARD 15.4: LEARNING THROUGH EXPERIENCE continued

15.4.2 RESILIENCE

STANDARD STATEMENT

- Demonstrate a beginning understanding of consequences for behavior
- Utilize help when needed
- Communicate feelings of distress or anxiety
- Engage in problem solving activities to achieve a positive outcome

EXEMPLARS (EXAMPLES)

The learner will:

- Name a consequence for a specific behavior
- Ask a friend who has mastered a skill to assist
- Tell teacher when s/he is feeling scared or apprehensive about a particular task
- Try new activities or tasks that build on previously-learned skills
- Strive to correct his/her own mistakes

SUPPORTIVE PRACTICES

The adult will:

- Provide guidance for improvement when children experience a lack of progress or failure to accomplish a goal or task
- Comfort children and provide encouragement during stressful times
- Encourage children to be autonomous by offering situations and tasks that can be completed independently
- Make referrals to health care, social service and other agencies as appropriate
- Model appropriate responses to difficult or uncomfortable situations
- Encourage step by step problem solving and completion of a task to maximize perception of successful outcomes

15.4.3 CULTURE

STANDARD STATEMENT

- Express information about own family or background
- Show interest in different familial structures
- Interact with materials from different cultures such as rain stick, map that depicts Asia or Africa
- Show acceptance of children who appear to be different

EXEMPLARS (EXAMPLES)

The learner will:

- Talk about spending the weekend with grandparents
- Look at pictures of families and make comparisons about what is similar or different from his/her own
- Play with materials from other cultures
- Use multicultural crayons to depict skin coloring when making a self portrait and compare it to others' colors and portraits
- Help the teacher learn useful classroom phrases from a home language
- Show interest in adaptive devices, such as a wheelchair or feeding tube and how they help children
- Show acceptance of a child with a disability and offer support where appropriate

SUPPORTIVE PRACTICES

The adult will:

- Seek out information from families or community organizations to assure appropriate responses and practices that represent the cultures of children in the classroom and center
- Learn words or phrases from children's home language to use during the school day
- Label classroom materials and equipment as well as take-home materials in the home languages of the children in the classroom
- Encourage family members to volunteer or share information, materials and activities that reflect home cultures
- Use varied approaches or methods for instruction and learning to accommodate children's learning abilities and styles
- Learn about families' expectations for children's school success and incorporate those goals into classroom activities and experiences
- Incorporate ethnic foods, music, books and materials into classroom life
- Use sensitivity in celebrating traditional holidays and incorporate other cultures' holidays into the curriculum
- Provide opportunities for children to practice non-specific gender roles such as dads taking care of babies and moms acting in non-traditional female careers
- Adapt the environment, materials, and instructional practices to assure all children have opportunities for success



APPROACHES TO LEARNING THROUGH PLAY GLOSSARY

Associative Play – A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction or a definite goal; children may imitate others in a group but each child acts independently

Attention – An ability to focus; take all stimuli in environment and focus the mind on one thing

Competence – The ability to perform a task, action, or function successfully

Cooperative Play – Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, arts, customs and behaviors

Curiosity – A desire to learn or know about something; an inquisitiveness

Engagement – Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work

Initiative – A readiness and ability to be eager to lead an action

Invention – An act of devising, creating or producing using imagination (art, music)

Parallel Play – A developmental stage of social development; an activity in which children play with toys like those the children around them are using, but child is absorbed in his/her own activity; usually play beside rather than with one another

Persistence – The steady continuance of an action in spite of obstacles or difficulties

Pretend Play – Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas

Persistence – The steady continuance of an action in spite of obstacles or difficulties

Resilience – The ability to cope with and bounce back from all types of challenges. A person thrives, matures and increases competence by drawing on biological, psychological and environment resources

Solitary Play – A form of play among a group of children within the same room or area in which each child engages in an independent activity using toys that are different from the toys of others; shows no interest in joining in or interfering with the play of others

Task Analysis – A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success

Temperament – The combination of mental, physical, and emotional traits of a person; natural predisposition



CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS



Creative thinking and expression is an important component of children's early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities and knowledge. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children's growing competence as creative problem solvers and provides insight about the world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

DIVERSITY AND CULTURE

Today's early childhood classrooms include an increasingly diverse group of children, families and teachers who represent many cultures, values and lifestyles. Providers have a unique opportunity to create welcoming environments that emphasize respect for diversity and support families' cultural and linguistic differences. Teachers must help assure the preservation of the child's home language while supporting their second language acquisition. Programs that create experiences and opportunities that honor all children's home cultures and values by developing creative strategies for including and expanding the home to school connection and provide children with varied ways to demonstrate their learning and understanding are assuring all children's success in school.



Standard

Page

9.1 Production and Performance	
9.1a Music and Movement	14
9.1b Dramatic and Performance Play	15
9.1c Visual Arts	15
9.2 Historical and Cultural Context of Works in the Arts	16
9.3 Critical Response to Works in the Arts	17
9.4 Aesthetic Response to Works in the Arts	17

STANDARD 9.1a: PRODUCTION AND PERFORMANCE: MUSIC AND MOVEMENT

BIG IDEA: Music can be used to express and initiate aesthetic and physical responses.

ESSENTIAL QUESTIONS: How can I use music and movement to express my ideas and feelings? Can I use the appropriate vocabulary to describe experiences?

9.1a.1 AESTHETIC RESPONSE

STANDARD STATEMENT

- Respond to different forms of music and dance and use basic vocabulary when describing action
- Identify and reproduce patterns of rhythm in music and dance

EXEMPLARS (EXAMPLES)

The learner will:

- Understand and use music vocabulary
- Discuss music and movement using appropriate vocabulary: fast/slow (tempo); high/low (pitch); short/long (duration); soft/loud (volume); strong/weak beat (rhythm)
- Sing and play instruments loudly and softly
- Keep rhythm to a song or poem using body movements or instruments
- Identify the rhythm of a known song and clap the pattern as the song is sung
- Copy rhythms modeled by the teacher

SUPPORTIVE PRACTICES

The adult will:

- Demonstrate singing and sources of sound, tempo, rhythm
- Use and model appropriate music and movement vocabulary when teaching
- Model and describe patterns and sequences used in dances
- Relate patterns in dance to patterns in mathematics
- Provide opportunities for learners to watch and discuss presentations or videos of music and movement
- Share a song or poem: have children clap the rhythm

9.1a.2 EXPLORATION

STANDARD STATEMENT

- Use instruments to accompany music or songs

EXEMPLARS (EXAMPLES)

The learner will:

- Use instruments to imitate sounds – a horses' hooves, a doorbell
- Use instruments to demonstrate the melody of a song

SUPPORTIVE PRACTICES

The adult will:

- Play many types of music
- Talk about the ways things sound and how that sound could be recreated
- Provide objects such as wooden bowls, that can be used to represent other sounds

9.1a.3 CREATION

STANDARD STATEMENT

- Use imagination and creativity to design and perform music and dance
- Work with partner or others to represent form in space



EXEMPLARS (EXAMPLES)

The learner will:

- Express ideas and feelings through music
- Use instruments to create a song
- Create a dance sequence with a beginning, middle and end
- Create movements of different tempos
- Invent rhythm to accompany a favorite story or poem
- Create movement patterns
- Create repetitive motions for songs, rhymes, finger plays and chants
- Play rhythms with instruments
- Use bodies to represent letters, shapes, objects by oneself or with others

SUPPORTIVE PRACTICES

The adult will:

- Provide different types of music for children to dance and sing to
- Provide a variety of instruments for children to use, such as bells, chimes, shakers, and rhythm sticks
- Provide props to use when dancing and singing such as ribbons, hoops, and sticks
- Model examples of creating music
- Create different lyrics to a familiar song
- Provide opportunities for children to perform music and movement activities
- Take class to school assemblies and programs
- Model appropriate handling of instruments
- Demonstrate movement using time, space and locomotion
- Read a story about a particular animal and have students move like that animal
- Include vocabulary such as high/low, up/down, fast/slow, over/under

STANDARD 9.1b: PRODUCTION AND PERFORMANCE: DRAMATIC AND PERFORMANCE PLAY

BIG IDEA: Dramatic and performance play is a way to act out reality and fantasy and to solve problems.

ESSENTIAL QUESTIONS: How can I use role-play to solve problems? Can I perform a play?

9.1b.1 DRAMATIC EXPRESSION

STANDARD STATEMENT

- Use multiple nonconforming representations of real life objects or activities
- Create and enact fantasy play scenarios
- Extend pretend play scenarios over multiple periods of time
- Use pretend play as a means to negotiate and resolve challenging situations



EXEMPLARS (EXAMPLES)

The learner will:

- Participate in role-play experiences and engage in discussion
- Use vocabulary to discuss play activities such as, character, role, setting, story
- Recreate situations that have caused concern during dramatic play
- Use materials and props in non-traditional ways
- Create new scenarios to enact

SUPPORTIVE PRACTICES

The adult will:

- Provide props and costumes associated with themes children are experiencing
- Ask questions about the experience to guide thinking and problem-solving
- Use appropriate theatre vocabulary as children create plays and performances
- Use theatre vocabulary to discuss stories and poems shared in class
- Observe dramatic play situations
- Encourage problem-solving of classroom situations through play
- Discuss possible solutions with children
- Model new uses for materials and ideas
- Provide materials that can be used in multiple ways

9.1b.2 PERFORMANCE

STANDARD STATEMENT

- Represent a character by using voice inflections and facial expressions
- Recreate a familiar story for an audience individually or cooperatively

EXEMPLARS (EXAMPLES)

The learner will:

- Act out parts of stories by inventing a voice and creating various facial expressions for the character
- Act out actions that relate to stories
- Create a play based on a familiar story
- Use appropriate tone, actions and speech to represent characters, setting and plot in a play

SUPPORTIVE PRACTICES

The adult will:

- Model voices and facial expressions of characters while reading aloud
- Provide opportunities for learners to practice different voice types
- Play charades
- Encourage learners to create plays based on familiar stories or original ideas
- Provide guidance and suggestions during preparation of play

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS

BIG IDEA: Visual arts allow individual expression of interests, abilities and knowledge.

ESSENTIAL QUESTIONS: Can I identify color, texture, form, objects and patterns in art? Can I create artwork using a variety of colors, forms and lines? How can I express my ideas about art and connect it to everyday life?

9.1c.1 REPRESENTATION

STANDARD STATEMENT

- Represent common themes and patterns in visual arts

EXEMPLARS (EXAMPLES)

The learner will:

- Paint and draw works of art
- Create a picture using lines and shapes
- Create various textures in a picture using different media
- Create simple sculpture using clay and various tools to create texture
- Use paints to create new shades and colors

SUPPORTIVE PRACTICES

The adult will:

- Model use of shape, texture and color
- Discuss use of line, shape, texture, patterns in art work
- Provide various objects with different textures to define and use
- Display a variety of artwork
- Provide a variety of examples of art
- Provide opportunities for children to explore and discover

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS continued

9.1c.2 CONSTRUCTION

STANDARD STATEMENT

- Create expressive images using a variety of media and techniques

EXEMPLARS (EXAMPLES)

The learner will:

- Express ideas and feelings through visual arts
- Create pictures that define mood
- Make choices about tools mediums, etc for visual arts

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities to create expressive images through play experiences
- Provide opportunities to explore a variety of art materials and tools in their own way
- Discuss and expand the child's art work through guided questions allowing for child's ownership and creativity
- Model and expect safe care, handling and use of art tools

9.1c.3 PERSONAL CONNECTIONS

STANDARD STATEMENT

- Discuss how art work represents an artist and his/her thoughts, emotions



EXEMPLARS (EXAMPLES)

The learner will:

- Recognize and discuss own and others' art work using appropriate vocabulary – color, shape, line and texture
- Discuss works of art to determine mood or emotion
- Point out differences and similarities in works of art
- Select pieces of artwork for display in the room or hallway
- Show respect for artwork exhibited by other students

SUPPORTIVE PRACTICES

The adult will:

- Use appropriate visual arts vocabulary when describing art work
- Use literature illustrations and other art-works to model vocabulary and to determine mood or idea
- Describe common themes and patterns that are repeated within each art form such as color, design, movement, shape, etc.
- Model how to self-select a best piece of artwork
- Point out artwork in hallways, offices and on field trips

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXT OF WORKS IN THE ARTS

BIG IDEA: Every culture has its own art forms.

ESSENTIAL QUESTION: Can I use various cultural art forms within my own creations?

9.2.1 PATTERNS AND THEMES

STANDARD STATEMENT

- Use various art forms from other cultures while creating own art works

EXEMPLARS (EXAMPLES)

The learner will:

- Create own works using various art forms from other cultures
- Create similar works of art to those displayed
- Reproduce songs and dance movements that are familiar

SUPPORTIVE PRACTICES

The adult will:

- Display many types of art work
- Show a variety of music and movement forms
- Play many types of music
- Provide materials and instruments from many cultures

STANDARD: 9.3 CRITICAL RESPONSE TO WORKS OF ART

BIG IDEA: People make choices about the types of art they like.

ESSENTIAL QUESTIONS: Can I make a judgment about an art form? Can I use appropriate words and terms to talk about works of art?

9.3.1 CRITICAL RESPONSE	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Compare others' products to ones own work 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Evaluate and form judgments about art using I statements Show respect for the response of others to a work of art Make comparative statements such as "I used color just like...." Or "I can tap dance like...." 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Model and describe judgments about others' work using "I" statements Use appropriate vocabulary when discussing art (volume, rhythm, line, color, jumps, characters, action, etc.) Provide opportunities to explore increasingly more complex art forms throughout the year
9.3.2 IDENTIFICATION	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Recognize and name a variety of elements within one form 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Identify a painting, sculpture, drawing, types of dance, types of songs, etc. Name music by type, such as drumming or singing 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Display children's and professional art throughout the classroom at the children eye level Discuss the various types and characteristics of painting, sculpture, dance, song, etc.

STANDARD: 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS

BIG IDEA: Artists create works as a form of self-expression and to share thoughts and ideas.

ESSENTIAL QUESTION: Can I explain how an art form makes me feel?

9.4.1 EMOTIONAL RESPONSE	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Make statements that express emotion about viewing or creating various art works 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Respond to works of art by expressing feelings ("This makes me feel happy because..."; "This makes me feel sad because...") Show appreciation for visual arts Respond to music by expressing feelings related to types of music Show appreciation for music and movement Respond to dramatic performances by expressing feelings about characters and actions Show appreciation for dramatic and performance play 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Model responding to works using emotions Model showing appreciation through notes Model showing appreciation clapping, saying thank you, etc. Ask clarifying questions such as, "Why did you say that?", "What do you notice that makes you respond that way?"
--------------------------	---	--	---

CREATIVE THINKING AND EXPRESSION GLOSSARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce

Aesthetic Response – A philosophical reply to works in the arts

Artistic Choices – Selections made by artists in order to convey meaning

Arts Resource – An outside community asset (e.g., performances, exhibitions, performers, artists)

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form

Community – A group of people who share a common social, historical, regional or cultural heritage

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, customs, arts and behaviors

Elements – Core components that support the principles of the arts

Genre – A type or category (e.g., music – opera, oratorio; theater – tragedy, comedy; dance – modern, ballet; visual arts – pastoral, scenes of everyday life)

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment

Multimedia – The combined use of media, such as movies, cd-roms, television, radio, print and the internet for entertainment and publicity

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists

Style – A distinctive or characteristic manner of expression

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts

Timbre – A unique quality of sound





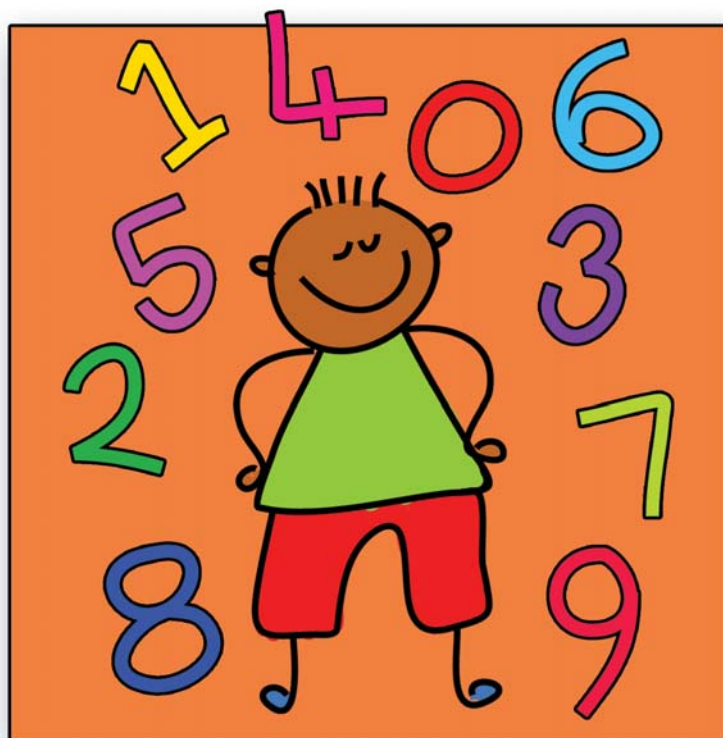
Learning and development is typically divided into learning domains: Physical, Intellectual or Cognitive, Social-Emotional, and Language and Literacy. Cognitive learning refers to the brain's functions that develop thinking, learning, awareness, judgment and information processing. In early childhood, Pennsylvania's Cognitive Domain includes the standards for the Key Learning Areas of Mathematics, Science and Social Studies. While each Key Learning Area contains content-specific information, children learn this information best when activities and materials are integrated together. A science experience that uses graphing (math) and cooperative small group work (social studies) combines thinking and processing to enhance and expand problem solving and critical thinking. Units of study that incorporate all the domains of learning into connected activities and projects scaffold learning and build new understandings and connections.

COGNITIVE THINKING & GENERAL KNOWLEDGE

- **MATHEMATICAL THINKING AND EXPRESSION: EXPLORING, PROCESSING AND PROBLEM SOLVING**
- **SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY**
- **SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES**

MATHEMATICAL THINKING AND EXPRESSION

EXPLORING, PROCESSING AND PROBLEM SOLVING



Mathematical learning in the early years relies on children's opportunities to describe and explore the relationship of objects and materials. Children's knowledge and understanding of mathematics is built through active manipulation where children use their senses to build concept knowledge in the areas of numbers and operations, patterns, algebra, geometry, measurement, and comparison. When children truly understand the fundamentals and have mastered the basic mathematical skills they will have the capacity and confidence to excel at learning more advanced mathematics. Teachers facilitate mathematical learning when they encourage children to problem solve, reason, communicate, connect and represent. When engaged in manipulative mathematical activities, children better understand the world around them, begin to use number concepts to communicate their own thoughts and ideas which means they are beginning to think and reason.

USE OF MANIPULATIVES IN EARLY LEARNING SETTINGS

Manipulatives are physical objects that are used as teaching tools to engage students in hands-on learning.. They can be used to introduce, practice, or remediate a concept. They can be used in all areas of math instruction. One kind of basic manipulative is a counter. There are a variety of counters that can be used to explore concepts. Objects can be sorted, arranged in patterns, counted, seriated, compared, calculated and investigated. Children's development moves from concrete to abstract so manipulatives need to be a part of instruction in all areas of development in the early years. Children can be given specific problems and activities to use with manipulatives or can use them to make discoveries and explore new ideas. The exploration of manipulatives allows children to have their curiosity satisfied. The use of manipulatives should be shared with families also.



Standard

Page

2.1	Numbers, Number Systems and Relationship.....	21
2.2	Computation and Estimation	22
2.3	Measurement and Estimation	24
2.4	Mathematical Reasoning and Connections	25
2.5	Mathematical Problem Solving and Communication..	26
2.6	Statistics and Data Analysis	27
2.7	Propability and Predictions	28
2.8	Algebra and Functions	29
2.9	Geometry.....	30
2.11	Calculus.....	31

STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

BIG IDEA: Mathematic knowledge is built in the areas of numbers and operations by organizing, representing and comparing numbers.

ESSENTIAL QUESTIONS: Why do I need to be able to count objects? How do I use numbers every day? How can I record what I count?

2.1.1 COUNT AND COMPARE NUMBERS

STANDARD STATEMENT

- Rote count by whole numbers to 100 by ones
- Attempt to count by tens along with an adult
- Read and write whole numbers 0 – 20
- Count up to 20 objects using one to one correspondence
- Use basic numbers and counting
- Use vocabulary independently to compare number of objects
- Tell what number comes before or after (up to 20)

EXEMPLARS (EXAMPLES)

The learner will:

- Practice group and individual rote counting experiences e.g. daily counts, objects in the classroom, counts children in class
- Count by ones and tens
- Count and match up to 20 objects using one to one correspondence
- Practice using vocabulary to compare numbers of objects e.g. 5 is more than 3; 2 is less than 3
- Choose from a group of three numbers what comes next

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities and support learner's counting during daily everyday activities
- Provide opportunities and support learners matching and counting objects (passing out snacks, counting manipulatives, learner's jacket, classroom materials; how many more do you need)
- Practice rote counting on a daily basis throughout the day's activities
- Post a number chart in the classroom for reference and daily use at group times
- Engage children in activities related to order of numbers (before, after) during small and individual group activities
- Provide practice of ordering numbers in learning center activities

2.1.2 REPRESENT NUMBERS IN EQUIVALENT FORMS

STANDARD STATEMENT

- Use concrete objects to represent quantities up to and including twenty
- Identify penny, nickel, dime
- Represent equivalent forms of the same number through the use of concrete objects and drawings up to and including 20

EXEMPLARS (EXAMPLES)

The learner will:

- Represent a given number up to twenty with manipulatives
- Count a set of manipulatives to match a given number
- Create sets of objects up to 20
- Recognize and practice writing numerals through 20 to label sets
- Practice producing sets of objects and attach to number words through five with assistance(create a set of two and match to the number word 2; show the number 2 and create a set of two objects)

SUPPORTIVE PRACTICES

The adult will:

- Model using the appropriate language/ vocabulary, the process of counting with one to one correspondence and write the number representing that amount
- Provide opportunities and support learners' counting with one to one correspondence during classroom activities
- Provide opportunities to write numerals to label sets
- Practice using number words to represent a numeral in small groups

2.1.3 CONCEPTS OF NUMBERS AND RELATIONSHIPS

STANDARD STATEMENT

- Use concrete objects to separate a set into two equal parts
- Group objects into sets of ten
- Use ordinal number words to describe the position of objects
- Match numerals to sets of objects

EXEMPLARS (EXAMPLES)

The learner will:


- Analyze a set of objects and practice dividing into two equal parts (4 blocks= 2 blocks and 2 blocks)
- Count a set of ten single objects and combine to create one set of ten
- Use ordinal numbers to describe the positions of objects (first, second, third, last)
- Match a numeral to a set up to 20

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities, and support learners counting, reading and writing numbers during various classroom activities
- Provide opportunities and support learners creating groups of ten during classroom activities (popsicle sticks, baggies of objects)
- Provide opportunities for learners to order objects (classmates, colored manipulatives) in groups and centers

STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

2.1.4 PLACE VALUE	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Practice regrouping ones to tens with adult assistance 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Practice counting objects up to 20 and grouping into sets of ten with assistance (12 = one group of 10 and 2 more) 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities for regrouping ones to tens during the daily routine
2.1.6 CONCEPTS AND APPLICATIONS OF OPERATIONS	<p>INDICATOR</p> <ul style="list-style-type: none"> Analyze numbers Visually quantify zero to five objects Solve word problems using concrete objects independently Create a sorting method 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Apply strategies of “counting on” and counting backwards Build new mathematical knowledge through problem solving Apply and adapt a variety of appropriate strategies to solve problems Increase ability to combine, separate and name how many concrete objects 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Analyze numbers and state properties of them Practice visually quantifying the number in a given set of 0 to 5 objects (that set has 3; no counting) Represent equivalent forms of the same number using concrete objects and drawings up to and including 10 Sort objects by various attributes and into groups of different quantities Practice addition by combining sets of concrete objects Practice subtraction by separating sets of objects Practice describing the results of combining and separating two sets using math vocabulary Implement the strategy of “counting on” when counting two sets of objects joined together (2 apples in one set and 3 apples in another set– say

STANDARD 2.2: COMPUTATION AND ESTIMATION

BIG IDEA: Students link concepts and procedures as they develop and use computational techniques, including estimation and mental arithmetic, to seek reasonable answers.

ESSENTIAL QUESTIONS: How do I estimate? How do I build knowledge through problem solving?

2.2.1 FLUENCY IN BASIC FACTS	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Practice reading number sentences with adult 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Read number sentences in pictorial form with and without numbers with adult support (2 apples plus 1 apple = equals 3 apples) 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Create number sentences up to the sum of 5 using flannelboard, and/or other manipulatives on a regular basis Provide opportunities for learners to create and read number sentences in group settings and in learning centers
------------------------------	---	---	--

CONTINUED...

STANDARD 2.2: COMPUTATION AND ESTIMATION continued

2.2.2 COMPUTATION

STANDARD STATEMENT

- Separate concrete objects into groups
- Represent addition and subtraction in every day situations using up to ten concrete objects
- Use “counting on” as a strategy for determining the sum
- Explain the results of joining and separating sets of objects up to and including 10 using math vocabulary
- Use counting backwards as a strategy for finding a difference in the numbers 1 – 10

EXEMPLARS (EXAMPLES)

The learner will:

- Use counters to solve simple math stories
- Draw pictures of two sets of objects, count them together and explain the process of joining the sets
- Explore the concepts of addition (sum) and subtraction (difference) by joining and separating sets of objects
- Use counters to make sets up to ten
- Practice “counting on” and counting backwards to join and separate sets
- Practice verbalizing that addition joins objects together and that subtraction separates items or takes away objects

SUPPORTIVE PRACTICES

The adult will:

- Create real life addition and subtraction problems for learners to solve by using pictures and/or concrete manipulatives
- Identify everyday classroom opportunities that involve the operation of addition and/or subtraction
- Create addition problems that join two sets of the same amount of objects
- Provide opportunities and support learners separating sets of objects and/or counters into two equal groups
- Provide opportunities and support learners using counters or objects to make and count sets (small group, individual, large group)

2.2.4 NUMERICAL ESTIMATION

STANDARD STATEMENT

- Estimate how many objects are in a set/group up to and including twenty objects
- Check estimate by counting the number of objects

EXEMPLARS (EXAMPLES)

The learner will:

- Estimate how many objects are in a group
- Check estimate by counting the number of objects
- Use mathematical language to explain estimating and/or comparing

SUPPORTIVE PRACTICES

The adult will:

- Model using the appropriate language/ vocabulary the process of estimation (less, ore, almost close, nearly)
- Provide opportunities and support learners in estimating a quantity (students bring objects from home)
- Provide support for learners estimating and counting the number of objects
- Encourage and support learners in explaining how they applied their skills during mathematical tasks
- Provide opportunities for learners to explore and apply understanding of joining subtracting, and dividing sets in learning centers
- Incorporate estimating activities into play
- Use cooking utensils in estimation activities (add measuring cups, pizza pans, bowls into dramatic play area)



STANDARD 2.3: MEASUREMENT AND ESTIMATION

BIG IDEA: Learners will identify attributes, units or systems of measurement and apply a variety of tools to explore the distance, weight, length, height, time and temperature of objects.

ESSENTIAL QUESTIONS: What do I understand about the measurement? How can I group objects according to common properties? What can I discover about quantities of objects?

2.3.1 CONCEPTS OF MEASUREMENT

STANDARD STATEMENT

- Measure objects
- Practice measuring calendar time using appropriate vocabulary with scaffolding
- Demonstrate understanding of number conservation



EXEMPLARS (EXAMPLES)

The learner will:

- Use positional vocabulary to describe the relative positions of objects
- Practice learning the names of the days of the week, months of the year and the four seasons through songs, chants and finger-plays
- Recognize parts of the day and discuss activities that occur in the morning, afternoon, and night
- Participate using the calendar
- Practice identifying the season, the month, and the date of today, tomorrow and yesterday with assistance
- Match objects one to one to determine equal, more, or less in set, and verbalize the size of objects does not affect the number of objects in a set e.g. match

SUPPORTIVE PRACTICES

The adult will:

- Incorporate spatial concept words into directions and sensorimotor activities throughout the day
- Order daily events and discuss the time that daily events occur
- Encourage the class at the end of the day to brainstorm things that happen/ed during the day that were memorable
- Point out months and seasons of the year as they change (characteristics)
- Introduce and use measurement vocabulary
- Practice one to one matching to reinforce number conservation concept (size versus number of objects; 3 oranges matched to 4 raisins = one more raisin than orange, even though oranges are larger in size than raisins)
- Pose questions about number conservation

2.3.2 UNITS AND TOOLS OF MEASUREMENT

STANDARD STATEMENT

- Estimate and measure objects using non-standard units
- Determine the length and height of objects with nonstandard units
- Practice naming the instruments used for measuring time, length, weight, volume, and temperature
- Order events based on time

EXEMPLARS (EXAMPLES)

The learner will:

- Select appropriate tools for the attribute being measured e.g. clock to tell time, scale to weigh, measuring cups to help bake a cake
- Explore objects to determine which will make a good measuring tool e.g. classroom objects like paper clips, unifix cubes, new pencils, shoes, hands, coins
- Use multiple units of the same size (non-standard units) to measure e.g. paperclips, unifix cubes
- Attempt to determine activities that take a long or short time
- Review what we do first, next, last
- Recall what we did or plan to do yesterday, today and tomorrow
- Talk about daily routine e.g. name part of day; order of day; where hands on clock might be

SUPPORTIVE PRACTICES

The adult will:

- Design and provide activities to help children recognize the attributes of length, weight, time and volume
- Provide opportunities, and support learners in determining the appropriate measurement tool to use
- Create measurement math stories that require students to determine which measuring tool to use (What would I need to do to find out how long I brush my teeth in the morning?)
- Provide sequence activities in group activities (large group, small group, individual group, learning center)

2.3.3 CALCULATIONS

STANDARD STATEMENT

- Analyze charts and graphs of objects with assistance and support from adult

EXEMPLARS (EXAMPLES)

The learner will:

- Share information about graphs and charts

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for sharing information on graphs and charts
- Assist learners in analyzing information from graphs
- Reinforce and encourage efforts

STANDARD 2.3: MEASUREMENT AND ESTIMATION continued

2.3.4 CONVERSATIONS

STANDARD STATEMENT

- Compare two objects using direct comparison
- Group objects according to common properties

EXEMPLARS (EXAMPLES)

The learner will:

- Compare and order objects on the basis of length, capacity, height, weight
- Use comparison vocabulary to describe how objects are related by length or height
- Compare the measurement of different classroom objects

SUPPORTIVE PRACTICES

The adult will:

- Incorporate comparative and spatial vocabulary to compare,
- Provide interesting for comparison in learning activities (large group, small group, center time)

2.3.6 MEASUREMENT AND ESTIMATION

STANDARD STATEMENT

- Practice using measurement vocabulary when comparing
- Practice estimating distance/length/weight based on experience



EXEMPLARS (EXAMPLES)

The learner will:

- Investigate the different ways to measure the various attributes of an objects
- Predict and analyze the relationship between items/objects represented by charts and graphs with assistance and support from adult
- Use measurement vocabulary with adult support and guidance

SUPPORTIVE PRACTICES

The adult will:

- Measure objects with learners (start at an end point and add on cubes until the cubes are equal in length to the object measuring)
- Allow students to create the signs for the center areas in the room and determine how many people may be in each area
- Demonstrate how to measure objects starting at an end point and adding on cubes until the cubes are equal in length to the object they are measuring
- Use appropriate measurement vocabulary regularly (Incorporate comparative and spatial vocabulary to compare, locate, and identify positions in space)

STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

BIG IDEA: Learners use inductive and deductive reasoning to make, check and verify predictions and to develop connections.

ESSENTIAL QUESTIONS: Why do I think my estimation is appropriate? How do I decide what connections there are between objects?

2.4.1 REASONING

STANDARD STATEMENT

- Verify predictions and solutions about environmental objects

EXEMPLARS (EXAMPLES)

The learner will:

- Analyze the size of containers and objects inside to estimate the quantity inside
- Make predictions using size and shape information
- Begin to make or test generalizations
- Answer questions about predictions made

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for learners to make predictions and validate
- Encourage and support learners to make predictions in small groups and learning centers
- Encourage learners to explain their reasoning (predictions, solutions)

CONTINUED...

STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

2.4.2 CONNECTIONS

STANDARD STATEMENT

- Identify connections between objects to help with problem solving

EXEMPLARS (EXAMPLES)

The learner will:

- Identify the common properties of objects
- Use the common properties to answer questions about number problems, such as all those objects with straight edges will fit along the sides of a puzzle

SUPPORTIVE PRACTICES

The adult will:

- Model, encourage and support learners as they attempt to recognize and apply techniques and strategies in solving problems and making connections
- Provide opportunities for learners to discover the cause and effect of predictions
- Pose daily open ended questions to promote thinking and reasoning
- Engage children in brainstorming other objects that “go together”

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

BIG IDEA: Learners solve and interpret results in various ways.

ESSENTIAL QUESTIONS: How do I apply a variety of concepts, processes and skills to solve problems? How do I communicate ideas or solutions with mathematical concepts? How do I present mathematical ideas using words, symbols visual display or technology?

2.5.1 PROBLEM SOLVING

STANDARD STATEMENT

- Identify and analyze a problem for possible solutions
- Seek information through observation, exploration and conversations



EXEMPLARS (EXAMPLES)

The learner will:

- Describe the steps necessary to solve a problem
- Make a plan to solve a problem
- Utilize different strategies and approaches to solve daily problems
- Apply reasoning to solve problems

SUPPORTIVE PRACTICES

The adult will:

- Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems
- Create and provide opportunities for learners to engage in problem solving activities (role play)
- Highlight the process versus the product of an activity (give specific examples)
- Establish problems in learning centers for learners to practice problem solving strategies

2.5.2 COMMUNICATION

STANDARD STATEMENT

- Communicate the findings from the problem solving process using math vocabulary
- Depict problem solving process through the use of pictures, simple chart or graph

EXEMPLARS (EXAMPLES)

The learner will:

- Practice explaining solutions to problem using math vocabulary
- Explain solutions to problems using visual displays
- Ask and answer questions about problems and solutions

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for explaining problems and solutions through pictures, displays, writing, drawing, or oral discussion
- Provide learning center activities that allow young learners to question and communicate their level of learning and understanding
- Pose higher level questions

STANDARD 2.6: STATISTICS AND DATA ANALYSIS

BIG IDEA: Learners collect, represent and analyze to answer questions, solve problems and make predictions.

ESSENTIAL QUESTIONS: How do I collect data? How do I explore and display data? How do I talk about the data? What patterns can I create and describe?

2.6.1 COLLECTION OF DATA	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Gather, organize and display data on a bar graph and/or pictograph independently Gather data in response to questions posed to learners 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Collect and organize data Collect data by answering questions Participate in classroom graphing activities by adding his/her input to a graph 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide a variety of materials for sorting, classifying, and creating patterns Provide materials in the learning centers that will facilitate collection data Provide opportunities for learners to collect information during their learning center time
2.6.2 ORGANIZATION AND DISPLAY OF DATA	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Organize and display objects by one or more attributes Practice explaining organization of data Create various types of graphs cooperatively with an adult and with other children 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Display data on yes/no, picture and bar graphs Practice creating bar graphs, pie graphs, line graphs with scaffolding 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities for learners to see graphs used in the real world (pizza, crackers) Provide activities in learning centers that allow learners to create graphs and charts Invite children to sort and organize collected materials by color, size, shape and graph
2.6.3 NUMERICAL SUMMARIES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Compare groups of one to ten objects to determine more or less Answer questions based on data shown on graphs or charts 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Match objects in groups one to one to compare more or less Count number of yes or no answers on a bar graph and recognize which has more answers 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Pose open ended questions to engage learners in reading the data on a graph Model, using the appropriate language/vocabulary, the process of determining equal and not equal sets Support learners in determining whether sets are equal (match 1 to 1, fewer, more) Encourage and support learners in their explanations Work with children to create simple bar graphs, line graphs Encourage the use of math vocabulary to explain graphs and charts
2.6.5 INTERPRETATION OF DATA	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Draw conclusions about information shown on a graph or chart 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Answer a variety of questions about the data on graphs such as which as more answers or how many people answered a specific way 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities for learners to explain their interpretation of graphs Ask learners to compare groups to find which group has the most, least, equal, not equal amount Pose questions to promote thinking and reasoning

STANDARD 2.7: PROBABILITY AND PREDICTIONS

BIG IDEA: Learners develop and evaluate predictions that are based on knowledge and data.

ESSENTIAL QUESTIONS: What words can I use to describe what is on the graph? How do I predict what will come next? What predictions can I make? How accurate will my predictions be?

2.7.1 CALCULATE PROBABILITIES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Predict the probability of an event 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Answer questions posed about particular events based on observation or experience, such as “is there enough pizza for everyone to have another slice?” 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Model, using the appropriate language/ vocabulary the process of determining the likelihood an event occurring Review examples of events that are most likely to occur at certain times (music class on Mondays, snow on a cold blustery day, hot on a summer day)
2.7.2 PREDICTION OF OUTCOMES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Predict outcomes of events 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Predict what would happen if ..(ice cream was not put in the freezer; what would happen if you never came to school? If all the class had two cookies and the learner only had one cookie) Develop questions to ask on a field trip 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Facilitate predictions for possible results by referring to previous events Provide opportunities for making predictions Support prediction efforts Provide opportunities for field trips
2.7.3 REPRESENTATIONS OF PROBABILITIES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Complete a simple graph to make selection with little or no assistance 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Choose yes/no as the probability of a familiar action occurring (only 5 of 20 learners coming to school on a given day) Choose an answer to a question about a routine occurrence (when do we go to lunch? When do you go to recess?) 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities and materials to complete simple graphs Provide graphs to read and interpret as part of daily routine
2.7.4 DISPLAY SIMPLE SPACES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Create a graph or chart and describe the contents 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Create a graph or chart and describe the contents (bar graph or yellow, red, orange- which has more? which has 3?) 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide materials for creating graphs and charts Provide assistance when needed
2.7.5 COMPARE THEORETICAL AND EXPERIMENTAL PROBABILITIES	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Answer questions based on data 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Answer questions about graph or chart 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Ask questions about graph or chart (open ended and close ended)

STANDARD 2.8: ALGEBRA AND FUNCTIONS

BIG IDEA: Learners discover how objects are related to each other using models, patterns and functions involving numbers, shapes, and graphs in problem solving situations.

ESSENTIAL QUESTIONS: How do I respond to routines? How do I use manipulatives to show relationships? What patterns can I create and describe?

2.8.1 ALGEBRAIC PROPERTIES

STANDARD STATEMENT

- Compare concrete objects to show equal or not equal

EXEMPLARS (EXAMPLES)

The learner will:

- Use manipulatives to create sets that are equal
- Compare number sentences that show answers that demonstrate equal/unequal amounts (2 apples + 3 apples = 5 apples and 3 apples + 2 apples also = 5 apples) (2 counters + 1 counter = 3 counters, but 1 counter + 3 counters does not equal 3 counters)

SUPPORTIVE PRACTICES

The adult will:

- Provide varied materials and amounts of materials for comparison e.g. shells, cereal, pebbles, buttons,
- Help children describe similarities and differences in concrete objects

2.8.2 ALGEBRAIC MANIPULATIONS

STANDARD STATEMENT

- Recreate a simple story problem using manipulatives
- Explain story problem solutions
- Identify the purposes for different mathematical symbols with scaffolding

EXEMPLARS (EXAMPLES)

The learner will:

- Use manipulatives and/or draw pictures to recreate a story
- Practice using numbers and symbols to represent addition and subtraction (+, -, =) in simple story problems
- Solve a simple story problem and explain the process using math language with scaffolding if necessary

SUPPORTIVE PRACTICES

The adult will:

- Support learners in their efforts to create number stories
- Create learning center opportunities for learners to engage developing story problems (flannelboard and pieces; wipe off boards; math manipulatives)
- Ask questions to obtain learners' understanding mathematical symbols

2.8.3 PATTERNS

STANDARD STATEMENT

- Recognize, describe, extend and transfer patterns
- Reproduce an existing pattern and verbalize the pattern
- Identify and create complex patterns using numerous objects

EXEMPLARS (EXAMPLES)

The learner will:

- Recognize, describe, and extend a two and three element pattern e.g. AB, ABC
- Reproduce an existing pattern and verbalize the pattern
- Create a simple and/or complex pattern using various objects (e.g. AB, ABC)



SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for children to create and extend patterns
- Model the creation of patterns using children, objects, and flannelboards,
- Have children recreate patterns using lacing beads, geoboards, and other manipulatives
- Encourage, model and discuss patterns (what is missing? Why do you think that is a pattern?)
- Engage learners in finding patterns in the environment, patterns in mathematics
- Engage learners in activities and interactions that encourage learners to look for patterns in and out of the classroom
- Provide opportunities for learners to create, reproduce and extend patterns in learning centers

STANDARD 2.8: ALGEBRA AND FUNCTIONS continued

2.8.4 FUNCTIONS	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Practice using concrete objects or pictures to represent a number story that involves a missing addend with adult assistance 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> With adult assistance and manipulatives, practice determining the missing addend in a number story 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities for determining missing addend Model solving problems with missing addend (use manipulatives) Support efforts of learners
2.8.5 MODELING	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Create a math story from a pictorial 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Create a math story from a picture e.g. 2 oranges plus 2 oranges equals 4 oranges(verbalize, write, draw) 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities for learners to practice creating math stories from pictures (flannelboard stories, manipulative stories) Model for learners and offer support for efforts
2.8.6 INTERPRET RESULTS OF MODELING	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Describe data on classroom graphs using numerical math language 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Describe data through the use of a number sentence e.g. I see 2 blue squares and 1 red square. If I put the squares together I would have 3 squares 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide support to learners as they practice describing data using number sentences

STANDARD 2.9: GEOMETRY

BIG IDEA: Children identify, name and describe a variety of shapes that are presented in many ways.

ESSENTIAL QUESTIONS: What makes shapes different from each other? What shapes can we see in our environment? How do shapes fit together and come apart? How can I position shapes in my environment?

2.9.1 DEFINITIONS, PROPERTIES AND RELATIONS	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Identify and name common two and three dimensional geometric shapes Compare the attributes of shapes Sort geometric figures according to common attributes 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Recognize and describe the attributes of geometric figures Match and compare the attributes of shapes Point out specific geometric figures in environment 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Model, using the appropriate language/vocabulary, the process of recognizing, describing the properties and naming geometric shapes (line segment, diagonal, angle, length, width, height) Provide opportunities and support learners in locating geometric shapes within the environment Provide materials and support learners in creating shapes (toothpicks, popsicles sticks, foam shapes, playdoh, straws, Model Magic) Provide opportunities and support learners in describing the attributes of shapes
--	---	---	--

CONTINUED...

STANDARD 2.9: GEOMETRY continued

2.9.2 TRANSFORMATIONS AND SYMMETRY

STANDARD STATEMENT

- Explore symmetry in nature
- Identify a reflection
- Create an example of symmetry independently



EXEMPLARS (EXAMPLES)

The learner will:

- Determine if shapes folded in half are the same or different (symmetrical or non-symmetrical)
- Observe items from nature to determine if they are symmetrical or non-symmetrical (leaves, butterflies, acorns)
- Use a variety of materials to create a symmetrical shape, such as paint blots
- Be able to define a reflection as a figure that does not change size

SUPPORTIVE PRACTICES

The adult will:

- Share examples of symmetry
- Provide opportunities and support learners in determining whether a shape or object is symmetrical
- Examine materials in nature for symmetry
- Share reflections with learners
- Model appropriate vocabulary

2.9.3 COORDINATE GEOMETRY

STANDARD STATEMENT

- Practice using directionality independently
- Use position words to describe the location of objects

EXEMPLARS (EXAMPLES)

The learner will:

- Explore geometric shapes turned in different ways
- Create various geometric shapes with manipulatives e.g. pattern blocks, geoboards and tangrams
- Talk about position and location of objects in the environment

SUPPORTIVE PRACTICES

The adult will:

- Model how a shape can be turned in different ways and remain the same shape
- Use appropriate vocabulary related to geometry
- Provide opportunities for learner to explore and apply understanding of geometry through the day

STANDARD 2.11: CALCULUS

BIG IDEA: Living objects grow and move at different rates.

ESSENTIAL QUESTIONS: How do I know how fast one thing grows or moves?

2.11.1 EXTREME VALUES

STANDARD STATEMENT

- Order whole numbers (0-20) from least to greatest value

EXEMPLARS (EXAMPLES)

The learner will:

- Place number cards in order from 0 - 20

SUPPORTIVE PRACTICES

The adult will:

- Model, using the appropriate language/vocabulary, the process of ordering numbers from least to greatest
- Use classroom tools such as the number line or the 100's chart to model strategies that support learning
- Provide opportunities and support learners in ordering numbers from least to greatest

2.11.2 RATES

STANDARD STATEMENT

- Identify situations that occur in real life that occur quickly or slowly

EXEMPLARS (EXAMPLES)

The learner will:

- Compare vehicles, pictures of people different ages and discuss the speed or rate of growth
- Identify animals that travel faster or slower than others
- Sequence pictures of human growth from infancy through adulthood

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities and support learners in deciding which real life object or event is faster or slower (talk about growth)
- Encourage and support learners in explaining how they applied their skills during mathematical tasks
- Model using the appropriate language/vocabulary, the process of deciding which real life event or object is faster and slower

MATHEMATICAL THINKING AND EXPRESSION GLOSSARY

Addends – Numbers used in mathematical operation of addition

Algebraic Expression – A group of numbers, symbols and variables that express a single series of operations

Angle – A geometric figure consisting of two rays with a common endpoint

Ascending Order – A listing in which numbers or terms are organized in increasing value

Bar Graph – A graph in which horizontal or vertical bars represent data

Concrete Objects – Physical objects used to represent mathematical situations

Counting On – Given two sets of objects in which to find the sum, learner counts one set and then counts on from the first set to the second set (3 apples in one set; 1 apple in other set– learner says 1-2-3 and then 4; there are 4 in all)

Data – Information gathered by observation, questioning or measurement, usually expressed with numbers

Descending – An order in which numbers or terms are organized in decreasing value

Estimate – A close rather than exact answer

Fractional Part – Part of a whole or part of a group that is less than a whole

Function – A rule that describes the commonalities between two patterns

Graph – A pictorial device that shows a relationship between variables or sets of data

Manipulatives – A wide variety of physical materials, objects, and supplies that students use to foster mathematic learning

Non Standard Measurement – A measure that is not determined by the use of standard units (paper clips, blocks)



Numerical Operations – Place, value, number sense, counting, correspondence, comparison, ordering numbers, addition/subtraction (joining/separating sets)

Number Sense – Understanding of numbers and their quantities

Ordinal Number – A whole number that names the position of an object in a sequence

Pattern – A set or sequence of shapes or numbers that are repeated in a predictable manner

Pictograph – A graph that uses pictures or symbols to represent data

Place value – The value of the position of a digit in a numeral

Predictions – Use of base information to produce an approximation of change or result

Probability – The measure of the likelihood of an event occurring

Reflection – A transformation creating a mirror image of a figure on the opposite side of a line

Seriation – Arranging objects in order by size or position in space (arrange in a series of pattern)

Spatial Sense – Building and manipulating mental representations of two and three dimensional objects

Standard Measurement – A measure determined by the use of standard units such as, inches, feet, pounds, cups, pints, gallons

Symbol – A sign used to represent something

Symmetry – An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place

Trigonometry – Relationship between the sides and angles of triangles

Whole numbers – The set of numbers consisting of the counting numbers and zero



SCIENTIFIC THINKING AND TECHNOLOGY

EXPLORING, INQUIRY AND DISCOVERY



All young children are naturally curious about their environment and the world around them and learn best when allowed to actively explore using their senses. These experiences provide the foundation for abstract and scientific thought. Students, who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support discovery about the natural world and the scientific process. For the young learner scientific concepts can be incorporated throughout the key areas of early learning; for example, children use pretend play to explore and manipulate materials, creative arts to express their ideas, and literacy and language arts to research answers to questions.

ASSESSMENT



Child assessment is an integral component of early childhood programs. When combined with observation, curriculum development and appropriate teaching practices, assessment provides the foundation for understanding children's growth and development. Ongoing and frequent reviews of children's accomplishments and progress enable teachers to learn how children change over time and provide information for developing responsive and appropriate instruction. Teachers use authentic assessment when they combine observation, portfolio collection, and parent report with research-based, standards-aligned curriculum-embedded instruments to obtain a clear picture of a child's interests, abilities and areas for focus.

Standard	Page
3.1 Biological Sciences	
3.1a Living and Non Living Organisms	34
3.1b Genetics	35
3.1c Evolution	36
3.2 Physical Sciences	
3.2a Chemistry	37
3.2b Physics	38
3.3 Earth and Space Sciences	
3.3a Earth Structure, Processes and Cycles	39
3.3b Origin and Evolution of the Universe	41
3.4 Technology: Exploration, Inquiry and Invention	
3.4a Scope of Technology	41
3.4c Technology and Engineering Design	42
3.4d Abilities for a Technological World	42
3.4e The Design World	43
Environment and Ecology	
4.1 Watersheds and Wetlands	44
4.2 Renewable and Non-Renewable Resources	44
4.3 Environmental Health	44
4.4 Agriculture and Society	44
4.6 Ecosystems and Their Interactions	45
4.7 Threatened, Endangered and Extinct Species	45
4.8 Humans and the Environment	45
4.9 Environmental Laws and Regulations	45

STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS**BIG IDEA:** There are a variety of living and non-living things.**ESSENTIAL QUESTIONS:** Do I notice similarities and patterns in living things? Can I explain why living things need air and water? Can I use my senses to help solve problems?

3.1a.1 COMMON CHARACTERISTICS OF LIFE	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the similarities and differences of living and non-living things Categorize plants and animals by external characteristics Describe why living things need air, food and water to survive 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Observe and document the growth of a living thing through drawings, writing and/or photos Note things that living things have in common (need air and water to survive) Note things that make living and non-living things different Sort animals according to their coverings such as fur, feathers, scales Classify insects by the ways they move such as hopping, crawling or flying Sort plants according to size, type of leaf, flowering or non-flowering Explain that living things need air and water to stay alive when asked 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Make comparison charts or Venn diagrams Display real objects as examples of living and non-living things Provide connections with literature Provide ways for children to document and illustrate their observations and discoveries Have children share how to care for a pet Grow a plant with children Keep a classroom pet
3.1a.3 LIFE CYCLES	STANDARD STATEMENT <ul style="list-style-type: none"> Identify stages of life cycles for plants and animals 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Draw and/or write the stages of a life cycle Recognize and sequence illustrations of a life cycle of a plant or animal 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide illustrations to demonstrate stages in life cycles Provide opportunities for children to observe plants or animals over time
3.1a.5 FORM AND FUNCTION	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the specific functions of living things' parts 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Explain that the lungs are for breathing, legs are for walking, roots intake water Draw and label a picture of a plant to identify specific parts 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide nonfiction texts for students to explore parts of living things Use diagrams to demonstrate parts of plants, animals and the human body
3.1a.8 UNIFYING THEMES	STANDARD STATEMENT <ul style="list-style-type: none"> Identify that living things and non-living things are made of parts that perform specific functions 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify parts of living things and explain their relationship to the whole Discuss function of specific parts, such as wings are for flying and legs are for walking 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Set up a learning area where children can take apart items, categorize parts and draw conclusions about their functions and relationships to the whole Integrate the concept of parts and whole whenever possible

CONTINUED...

STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS**3.1a.9 SCIENCE AS INQUIRY****STANDARD STATEMENT**

- Use the five senses as tools with which to observe, collect information, classify, describe and solve problems
- Use observation to develop a descriptive vocabulary based on sensory experiences

EXEMPLARS (EXAMPLES)**The learner will:**

- Identify the many ways senses are used
- Identify common items using senses
- Describe similarities and differences of items discovered using senses
- Use comparative vocabulary to express degrees of similarities and differences
- Use vocabulary to describe observation

SUPPORTIVE PRACTICES**The adult will:**

- Compare and contrast materials
- Provide connections to literature
- Provide many opportunities for sensory explorations
- Model vocabulary to extend children's observations
- Engage children in observation and use of all senses
- Use vocabulary when answering and asking questions
- Write vocabulary on cards to be hung in classroom near science center

STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS

BIG IDEA: There are a variety of living and non-living things.

ESSENTIAL QUESTIONS: Can I compare common physical characteristics? Can I identify ways living things produce?

3.1b.1 HEREDITY**STANDARD STATEMENT**

- Compare similar characteristics of own family with other families

EXEMPLARS (EXAMPLES)**The learner will:**

- Name characteristics observed in photographs such as hair color, eye color and height that are common among families
- Notice characteristics that are common within families such as everyone has red hair or blue eyes
- Organize data to identify similarities and differences among humans
- Describe ways in which people are more like each other than animals

SUPPORTIVE PRACTICES**The adult will:**

- Provide pictures of adults and their offspring for identification of inherited physical characteristics
- Display family photographs
- Have children compare handprints

3.1b.2 REPRODUCTION**STANDARD STATEMENT**

- Identify different ways living things reproduce

EXEMPLARS (EXAMPLES)**The learner will:**

- Identify eggs, seeds, babies and match to the parent bird, plant or adult human

SUPPORTIVE PRACTICES**The adult will:**

- Display pictures that show life cycles
- Discuss how the adult begins as a seed, egg or baby
- Provide non-fiction literature connections

3.1b.5 UNIFYING THEMES**STANDARD STATEMENT**

- Explore patterns that regularly occur in nature

EXEMPLARS (EXAMPLES)**The learner will:**

- Identify natural patterns in leaves, insides of shells, coats of animals
- Replicate natural patterns using appropriate materials in the classroom

SUPPORTIVE PRACTICES**The adult will:**

- Discuss attributes of a pattern whenever appropriate
- Show examples of patterns in the environment
- Provide materials for children to create patterns

CONTINUED...

STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS continued**3.1b.6 SCIENCE AS INQUIRY****STANDARD STATEMENT**

- Connect known ideas with new knowledge to build understanding or refine concepts

EXEMPLARS (EXAMPLES)**The learner will:**

- Ask questions about observations
- Predict what might happen next
- Review results of experiments or observations to plan for new experiment
- Respond to “what if” questions

SUPPORTIVE PRACTICES**The adult will:**

- Ask “what if” questions
- Compare and contrast materials
- Provide opportunities to observe and explore to build a broader base of knowledge from which to construct new ideas

STANDARD 3.1c: BIOLOGICAL SCIENCES: EVOLUTION

BIG IDEA: There are a variety of living and non-living things.

ESSENTIAL QUESTIONS: Can I tell what animals and humans need based on weather conditions? Can I explain why changes have occurred? Can I explain what I've observed?

3.1c.2 ADAPTATION**STANDARD STATEMENT**

- Identify characteristics for animal and human survival identified with seasonal changes

EXEMPLARS (EXAMPLES)**The learner will:**

- Describe how animals and people adapt to the seasonal temperature change
- Observe and record the behavior of local animals and they prepare for changes in the seasons
- Match pictures of animals engaged in specific activity to a season
- Identify animal adaptations that help them to move in different habitats such as the webbed toes of a frog, wings on a bird, giraffe's long neck
- Sort animals according to their habitat
- Name ways humans adapt for the seasons

SUPPORTIVE PRACTICES**The adult will:**

- List animals that hibernate or migrate
- List types of clothing people use seasonally
- Compare and contrast body structures of certain animals
- Discuss how body structures help animals survive
- Provide literature connections – both fiction and non-fiction

3.1c.3 UNIFYING THEMES**STANDARD STATEMENT**

- Identify reasons for observed changes

EXEMPLARS (EXAMPLES)**The learner will:**

- Use drawings or descriptions to explain why plants change or humans dress differently for seasons

SUPPORTIVE PRACTICES**The adult will:**

- Take nature walks to observe and discuss changes in the local plants and animals
- Provide observation journals and materials
- Read books or visit a construction site to observe and discuss change in natural and physical systems

3.1c.4 SCIENCE AS INQUIRY**STANDARD STATEMENT**

- Form clear explanations based on observations

EXEMPLARS (EXAMPLES)**The learner will:**

- Record observations, explanations and ideas through multiple forms of representation including drawing, simple graphs, writing and movement
- Ask clarifying questions
- Use information collected to support answer to “why” questions
- Draw conclusions from results

SUPPORTIVE PRACTICES**The adult will:**

- Provide opportunities to observe and record information
- Provide documentation of steps taken and results by chart, posters, photography
- Answer questions
- Provide resources for children to find answers
- Provide feedback on child's conclusions

STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY**BIG IDEA:** Physical properties help us to understand the world.**ESSENTIAL QUESTIONS:** What happens when I combine objects or substances? How do I discover the properties of objects?

3.2a.1 PROPERTIES OF MATTER	STANDARD STATEMENT <ul style="list-style-type: none"> Classify items by properties of matter 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Sort and classify common classroom materials or household items by solid, liquid or gas 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide materials such as clay, cloth, paper or pictures for children to sort and classify Compare and contrast properties of matter
3.2a.2 STRUCTURE OF MATTER	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the three types of matter 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify solid, liquid and gas when presented with real objects or pictures 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Fill two clear containers; one with solid objects and the other with colored liquid. Label another empty container. Encourage children to identify the type of matter in each container
3.2a.3 MATTER AND ENERGY FLOW	STANDARD STATEMENT <ul style="list-style-type: none"> Describe the way matter can change 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use the words melt, heat, mix, cut, freeze to describe what happens to matter 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Model appropriate vocabulary while engaging with children in experiments Use words such as mixture, liquid, solid, combine, mix, freeze, melt
3.2a.4 REACTIONS	STANDARD STATEMENT <ul style="list-style-type: none"> Describe what happens when two or more substances are combined 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Participate in safe classroom cooking activities Describe what happens when ingredients are combined Observe and describe an ocean in a bottle 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Add water and vegetable or baby oil to make an ocean in a bottle Use vocabulary when conducting cooking activities Ask children to predict what will happen as substances are combine
3.2a.5 UNIFYING THEMES	STANDARD STATEMENT <ul style="list-style-type: none"> Examine and explain change through simple observation and recording 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Record results of cooking activities or experiments using matter Draw an explanation of what occurred 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide activities for observation and the documentation of change Provide literature to support connections

CONTINUED...

STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS**BIG IDEA:** Physical properties help us to understand the world.**ESSENTIAL QUESTIONS:** Can I use wind or water power? Can I describe variations in sound? Can I explain a reaction sequence? Can I design a scientific investigation?

3.2b.1 FORCE AND MOTION OF PARTICLES AND RIGID BODIES	STANDARD STATEMENT <ul style="list-style-type: none"> Apply knowledge of motion to new toys and objects 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Push or pull a toy to make it go forward, forward, around or zig zag Use ramp to increase speed Create ramps of various sizes Describe play with toys using directional words 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Include materials in centers for children to explore motion such as inclines and wheeled toys in the block area or clear tubing at the water table
3.2b.2 ENERGY STORAGE AND TRANSFORMATIONS- CONSERVATION LAWS	STANDARD STATEMENT <ul style="list-style-type: none"> Explore basic energy types and sources 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify energy forms such as sunlight, heat, wind and motion Make rockets with balloons Build pinwheels, kites or paper airplanes to explore wind Use water wheels and tubing at the water table to create different effects 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide experiments that use energy Read non-fiction books Ask children to explain what is making the object move
3.2b.4 ELECTRICAL AND MAGNETIC ENERGY	STANDARD STATEMENT <ul style="list-style-type: none"> Use and explain the concepts of magnetic force 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use a magnet to attach one object to another Describe and record what occurs when magnets are near objects Identify things that are magnetic or non-magnetic 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Create a chart of things that are magnetic Encourage children to use magnets in structures and buildings when possible
3.2b.5 NATURE OF WAVES AND SOUND	STANDARD STATEMENT <ul style="list-style-type: none"> Demonstrate and describe variations of sound 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use a variety of materials to create sounds Identify sources of sound Identify a sound is high or low, loud or soft Use varying force to create different sounds Observe and relate that vibrations of objects such as guitar strings or a drum head create sound 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide materials for sound exploration Take a sound walk to identify sounds Provide instruments for exploration

CONTINUED...

STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS continued**3.2b.6 UNIFYING THEMES****STANDARD STATEMENT**

- Identify the relationship between action and its reaction using an "if-then" statement

EXEMPLARS (EXAMPLES)

The learner will:

- Make a statement such as "If I do...then...will happen"

SUPPORTIVE PRACTICES

The adult will:

- Ask children to describe an action/reaction sequence using if-then statements

3.2 b.7 SCIENCE AS INQUIRY**STANDARD STATEMENT**

- Create scientific investigations

EXEMPLARS (EXAMPLES)

The learner will:

- Identify a problem to be solved, pose possible solutions and test them, with adult support

SUPPORTIVE PRACTICES

The adult will:

- Engage children in identifying and implementing solutions
- Set up problem solving activities
- Provide materials to test out solutions

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES**BIG IDEA:** Interactions occur on Earth and in space.**ESSENTIAL QUESTIONS:** Can I identify earth forms in my community? Can I identify changes through observation and explanation? Can I distinguish between types of earth? Can I use tools and observation to find information?**3.3a.1 EARTH FEATURES AND THE PROCESSES THAT CHANGE IT****STANDARD STATEMENT**

- Identify and distinguish between earth forms

**EXEMPLARS (EXAMPLES)**

The learner will:

- Use the terms flat land, hills and mountains to describe local spaces in the community
- Create a mural that illustrates the concepts of flat land, hills and mountains

SUPPORTIVE PRACTICES

The adult will:

- Use books and pictures to show examples of land forms
- Take the children on a walk or field trip to experience these landforms
- Provide art materials to make pictures and models of these landforms

3.3a.2 EARTH'S RESOURCES AND MATERIALS**STANDARD STATEMENT**

- Distinguish between three types of earth: rock, soil and sand

EXEMPLARS (EXAMPLES)

The learner will:

- Use vocabulary to describe features of types of earth
- Examine materials and label them
- Sort rocks by attributes on a rock chart
- Compare and contrast a collection of rocks
- Place rocks on a balance to determine which one is heavier

SUPPORTIVE PRACTICES

The adult will:

- Rotate soil, sand and different rock types in the sensory table for exploration
- Take children to dig for soil samples and observe what is in the soil such as worms, leaves and rock
- Take children on a rock discovery walk
- Ask questions about the attributes of rocks
- Provide tools for observation

CONTINUED...

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES cont.**3.3a.4 WATER****STANDARD STATEMENT**

- Identify examples of water in solid and liquid states
- Identify sources of water

EXEMPLARS (EXAMPLES)**The learner will:**

- Identify water and ice
- Explain what makes water solid and what makes ice melt
- Identify streams, lakes, oceans

SUPPORTIVE PRACTICES**The adult will:**

- Provide water for exploration
- Bring icicles and snow into the classroom for exploration and experimentation
- Talk about sources of water
- Create a KWL chart about water around the world
- Provide literature connections about fresh and salt water

3.3a.5 WEATHER AND CLIMATE**STANDARD STATEMENT**

- Identify seasonal changes in the environment
- Distinguish between different types of precipitation
- Collect, describe and record information about weather
- Read a thermometer to identify the temperature

**EXEMPLARS (EXAMPLES)****The learner will:**

- Create a seasonal collage or booklet for each season
- Create a picture showing different types of precipitation
- Name various types of precipitation such as rain, fog, snow, hail
- Discuss the weather as it pertains to meaningful events such as going outside for recess or going on a field trip
- Conduct an experiment using a rain gauge
- Read a thermometer to determine the outside temperature

SUPPORTIVE PRACTICES**The adult will:**

- Provide materials for children to sort according to weather or season
- Provide materials to investigate weather concepts such as making a cloud in a jar, making hail with colored clay or building a wind vane with cardstock and straws
- Use the newspaper weather report to discuss weather around the state, country and world
- Conduct weather experiments
- Chart the daily temperature
- Create a daily weather graph to compare and contrast monthly weather and temperature patterns

3.3a.6 UNIFYING THEMES**STANDARD STATEMENT**

- Examine and explain change through simple observation and recording

EXEMPLARS (EXAMPLES)**The learner will:**

- Record own growth from infancy to kindergarten through the use of photographs, drawings and writings
- Plant seeds, recording the change in their appearance over time
- Record the seasonal change in the appearance of a tree throughout the year

SUPPORTIVE PRACTICES**The adult will:**

- Read books about animals and changes
- Visit a construction site to observe and record changes
- Go on nature walks to observe and discuss changes in the local plants and animals
- Provide activities for observation and the documentation of change



STANDARD 3.3b: EARTH AND SPACE SCIENCES: ORIGIN AND EVOLUTION OF THE UNIVERSE**BIG IDEA:** Interactions occur on Earth and in space.**ESSENTIAL QUESTION:** Can I identify features in space?

3.3b.1 COMPOSITION AND STRUCTURE	STANDARD STATEMENT <ul style="list-style-type: none"> Identify features of space 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Name features found in space such as stars, moon, planets, sun Tell an adult about how big the moon was last night Discuss how people travel in space Notice changes in sidewalk shadows over time 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide pictures of space including planets, stars, galaxy Read books about space and space travel Provide models of planets and spaceships for play Discuss space travel Show videos of space ships taking off, traveling in space and landing
---	--	---	---

STANDARD 3.4a: TECHNOLOGY: SCOPE OF TECHNOLOGY**BIG IDEA:** Technology impacts daily living.**ESSENTIAL QUESTIONS:** Can I identify many types of technology and functions? Can I use technology to complete a task?

3.4a.1 CHARACTERISTICS OF TECHNOLOGY	STANDARD STATEMENT <ul style="list-style-type: none"> Identify types of technology in the workplace, school or home 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify phones, computers, printers and copiers 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about the kinds of technology at school or in a business Compare and contrast this technology to what is found in a home
---	---	--	--

3.4a.2 CORE CONCEPTS OF TECHNOLOGY	STANDARD STATEMENT <ul style="list-style-type: none"> Identify types of technology by function 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Sort and classify technology by function such as a camera and video recorder can take pictures 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide pictures or examples of real items for children to sort and classify
---	--	--	--

3.4a.3 TECHNOLOGY CONNECTIONS	STANDARD STATEMENT <ul style="list-style-type: none"> Select and use appropriate technology to complete a task 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use a computer to write a document or a CD player to listen to a song or story 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Enable children to have the capacity to use technology independently
--------------------------------------	--	--	--

STANDARD 3.4a: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTION; TECHNOLOGY AND ENGINEERING DESIGN**BIG IDEA:** Technology impacts daily living.**ESSENTIAL QUESTIONS:** Can I use simple tools as intended?

3.4.c.1 DESIGN ATTRIBUTES	STANDARD STATEMENT <ul style="list-style-type: none"> Solve simple problems using appropriate tools and materials 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use a thermometer to discover the temperature Get a pail to carry water to the water table Sweep up spilled pencil shavings using a dust pan and broom 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Ask children how they could solve a problem Encourage children to solve problems independently Provide household and classroom tools for children to use independently
3.4.c.2 ENGINEERING DESIGN	STANDARD STATEMENT <ul style="list-style-type: none"> Experiment creating new designs with a variety of materials 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Experiment creating new designs using classroom materials eg: a variety of shapes, blocks, manipulatives, scrap of fabric 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Encourage experimentation with a variety of materials Assist learner in designing new creation Reinforce efforts of learner Provide opportunities for learner to share designs

**STANDARD 3.4d: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTION: ABILITIES FOR A TECHNOLOGICAL WORLD****BIG IDEA:** Technology impacts daily living.**ESSENTIAL QUESTIONS:** Can I identify the steps in completing a project?

3.4.d.1 APPLYING THE DESIGN PROCESS	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the steps in completing a project 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Tell all the steps necessary in constructing a block structure 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Visit a real construction site to document progress Take pictures as children are creating a block structure Encourage children to document their own progress and identify the steps they are taking
--	--	--	---

STANDARD 3.4e: TECHNOLOGY: THE DESIGN WORLD**BIG IDEA:** Technology impacts daily living.**ESSENTIAL QUESTIONS:** Can I describe medical equipment? Can I describe and use wind power? Can I use a computer in many ways? Can I describe transportation and construction vehicles?

3.4e.1 MEDICAL TECHNOLOGIES	STANDARD STATEMENT <ul style="list-style-type: none"> Describe the appropriate instruments used in medical technology 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Explain which device would be used to listen to the heart or lungs or which one would be used to take blood pressure 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide pictures that show instruments being used for certain functions Discuss how instruments should be used
3.4e.3 ENERGY AND POWER TECHNOLOGIES	STANDARD STATEMENT <ul style="list-style-type: none"> Describe wind power 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Describe how wind power can move objects Move objects by different types of wind power, such as blowing or waving in the air 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide materials for children to create objects to use in the wind
3.4e.4 INFORMATION AND COMMUNICATION TECHNOLOGIES	STANDARD STATEMENT <ul style="list-style-type: none"> Identify communication methods that exist within the home and school Use a computer for a variety of applications 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify phone, intercom, computer Access information via a web browser with teacher assistance Design a picture on the computer Create a word processed document 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about the ways that people can communicate with one another at home and at school Use computer Identify topics to explore using a web browser Provide regular computer access during play and structured parts of the day Use the computer to enhance other learning Send email to parent or guardian
3.4e.5 TRANSPORTATION TECHNOLOGIES	STANDARD STATEMENT <ul style="list-style-type: none"> Describe types of transportation vehicles and how they operate 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Explain that a train moves on rails, a boat floats with wind or motor power, a car or truck drives on the road and a plane flies in the air 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Display pictures of many kinds of transportation Provide a variety of transportation toys Encourage children to sort and classify vehicles using a variety of categories
3.4e.7 CONSTRUCTION TECHNOLOGIES	STANDARD STATEMENT <ul style="list-style-type: none"> Describe construction vehicles, simple tools, materials and processes 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use toys and vehicles to recreate and describe a construction process 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide pictures of constructions sites with tools, materials and equipment Provide books describing types of vehicles, tools and materials Visit a construction site

STANDARD 4.1: ENVIRONMENT AND ECOLOGY

BIG IDEA: We are impacted and have impact on our environment.

ESSENTIAL QUESTIONS: Can I identify types of moving water? What are some products that come from nature? How can I conserve and protect natural resources? How does agriculture support human needs? What are some events that occur in a cycle in nature? Can I explain that dinosaurs are extinct? Can I match shelters to an appropriate environment?

4.1 WATERSHEDS AND WETLANDS	STANDARD STATEMENT <ul style="list-style-type: none"> Identify bodies of water in the world Identify types of moving water 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Describe the differences between bodies of water such as ocean, river, lake and puddle Identify different bodies of water in photographs and videos Participate in experiments to see how water moves Identify moving water such as rivers and oceans 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Read books about different bodies of water Provide photographs and videos that show various bodies of water Take field trips to experience and observe bodies of water, when possible Provide opportunities for experiments to understand the movement of water
4.2 RENEWABLE AND NON-RENEWABLE RESOURCES	STANDARD STATEMENT <ul style="list-style-type: none"> Identify products that come from nature Identify ways to conserve resources 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify paper or syrup as things that come from nature Distinguish between something in its natural state and something in a manufactured state such as cotton and cloth List ways to conserve water or electricity at home and school Create illustrations, poster and/or murals showing ways to save water or electricity 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide examples of items in natural and manufactured forms such as apples and applesauce Discuss the importance of water and electricity and ways to conserve it Read books about conservation of resources Invite guest speakers to discuss conservation
4.3 ENVIRONMENTAL HEALTH	INDICATOR <ul style="list-style-type: none"> Describe the effects litter and pollution have on the environment 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Name the ways litter and pollution harm the environment 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Facilitate experiments that demonstrate the effects of pollutions such as oil spills or excessive noise Conduct a litter clean up
4.4 AGRICULTURE AND SOCIETY	STANDARD STATEMENT <ul style="list-style-type: none"> Explain that agriculture (farming) provides humans with basic needs 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify the components of the farming system such as the farmer, animals, buildings, land in drawings or models Identify the activities on a farm such as shearing and how that provides humans with clothing Connect the types of things produced on a farm with things humans need 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Take a field trip to a local farm or dairy and a grocery store to see where the food comes from Display photographs of Pennsylvania farms Invite a farmer to visit the classroom to share what they do

CONTINUED...

STANDARD 4.1: ENVIRONMENT AND ECOLOGY continued**4.6 ECOSYSTEMS
AND THEIR
INTERACTIONS****STANDARD STATEMENT**

- Record and describe events that occur in a cycle

EXEMPLARS (EXAMPLES)**The learner will:**

- Illustrate and describe the cycle of day and night
- Discuss other cycles that occur in nature such as seasons, seeds to plants
- Sequence pictures of cyclical events in nature

SUPPORTIVE PRACTICES**The adult will:**

- Provide pictures to practice sequencing
- Discuss and compare cycles in nature
- Read books such as *The Very Hungry Caterpillar*, *The Tiny Seed* or *A House for a Hermit Crab*

**4.7 THREATENED,
ENDANGERED AND
EXTINCT SPECIES****STANDARD STATEMENT**

- Identify why some animals and plants are extinct

EXEMPLARS (EXAMPLES)**The learner will:**

- Explain that dinosaurs are no longer on the Earth because they are extinct
- Define the meaning of extinct
- Tell why species become extinct
- Identify the difference between extinct and endangered

SUPPORTIVE PRACTICES**The adult will:**

- Read books and other information about dinosaurs
- Use the word extinct to explain why dinosaurs are no longer present on the Earth

**4.8 HUMANS
AND THE
ENVIRONMENT****STANDARD STATEMENT**

- Explain that humans live in shelters dependent on the environment

EXEMPLARS (EXAMPLES)**The learner will:**

- Describe protective shelters
- Name a variety of shelters that humans use
- Match shelters to areas in which they would be appropriate

SUPPORTIVE PRACTICES**The adult will:**

- Talk about matching shelter to the environment such as a houseboat on a river or an apartment in a city
- Read books about types of shelters
- Display pictures of a variety of shelters in many environments

**4.9 ENVIRONMENTAL
LAWS AND
REGULATIONS****STANDARD STATEMENT**

- State rules that protect the environment

EXEMPLARS (EXAMPLES)**The learner will:**

- Describe the ways in which these rules are helpful
- Name specific rules such as *Do Not Litter*
- Create posters or murals describing these rules

SUPPORTIVE PRACTICES**The adult will:**

- Discuss how laws and rules help us
- Create a list of rules that help protect the environment
- Invite people who hold jobs dealing with the environment to describe their job and why it's important

SCIENCE AND TECHNOLOGY GLOSSARY

Construction Technology – The ways that humans build structures on sites

Fact – Information that has been objectively verified

Hypothesis – An assertion subject to verification or proof as a premise from which a conclusion is drawn

Information Technology – The technical means that humans create to store and transmit information

Inquiry – A systematic process for using knowledge and skills to acquire and apply new knowledge

Law – Summarizing statement of observed experimental facts that has been tested many times and is generally accepted as true

Manufacturing Technology – The ways that humans produce goods and products

Model – A description, analogy or a representation of something that helps us understand it better (e.g., a physical model, a conceptual model, a mathematical model)

Patterns – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form

Science – Search for understanding of the natural world using inquiry and experimentation

System – A group of related objects that work together to achieve a desired result

Transportation Systems – A group of related parts that function together to perform a major task in any form of transportation

Transportation Technology – The physical ways humans move materials, goods and people

Tool – Any device used to extend human capability including computer-based tools



ENVIRONMENT AND ECOLOGY GLOSSARY



Ecosystem – A community of living organisms and their interrelated physical and chemical environment

Endangered species – A species that is in danger of extinction throughout all or a significant portion of its range

Environment – The total of the surroundings (air, water, soil, vegetation, people, wildlife) influencing each living being's existence, including physical, biological and all other factors; the surroundings of a plant or animal, including other plants or animals, climate and location

Extinction – The complete elimination of a species from the earth

Nonrenewable resources – Substances (e.g., oil, gas, coal, copper, gold) that, once used, cannot be replaced in this geological age

Recycling – Collecting and reprocessing a resource or product to make into new products

Regulation – A rule or order issued by an executive authority or regulatory agency of a government and having the force of law

Renewable – A naturally occurring raw material or form of energy that will be replenished through natural ecological cycles or sound management practices (e.g., the sun, wind, water, trees)

Wetlands – Lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes)

SOCIAL STUDIES THINKING

CONNECTING TO COMMUNITIES



The foundation of social studies, economics, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand this scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

PLAY, PLAY AND PLAY SOME MORE!



The best way to support children's learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information in order to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children who learn together in the dramatic play or block areas how to cooperate in order to figure out how many blocks can be added to a structure before it falls have stronger social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children's thinking and problem solving.

Standard	Page
5.1 Principles and Documents of Government	48
5.2 Rights and Responsibilities of Citizens.....	48
5.3 How Government Works	49
6.1 Economic Systems	50
6.2 Markets and the Functions of Governments.....	50
6.3 Scarcity and Choice	51
6.4 Economic Interdependence.....	52
6.5 Work and Earnings	52
7.1 Basic Geographic Literacy	53
7.2 Physical Characteristics of Places and Regions.....	53
7.3 Human Characteristics of Places and Regions.....	54
7.4 Interactions Between People and the Environment..	54
8.1 Historical Analysis and Skills Development	55

STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

BIG IDEA: Good citizens follow rules.

ESSENTIAL QUESTIONS: What rules and consequences are important? Can I identify some American symbols?

5.1.1 SOURCES, PURPOSE AND FUNCTIONS OF LAW	STANDARD STATEMENT <ul style="list-style-type: none"> Explain the purpose of a rule 	EXEMPLARS (EXAMPLES) <p>The learner will:</p> <ul style="list-style-type: none"> Identify rules in school related to fire drills, lunch, walking in the halls, bus safety, classroom, playground, etc. Explain why rules are important Explain what happens when rules are broken Suggest rules that could make the classroom or school a better place 	SUPPORTIVE PRACTICES <p>The adult will:</p> <ul style="list-style-type: none"> Engage students in developing a set of classroom rules Take a practice bus ride and discuss bus safety rules Model and practice rules for all areas of the building
5.1.5 SYMBOLS AND HOLIDAYS	STANDARD STATEMENT <ul style="list-style-type: none"> Identify several American symbols 	EXEMPLARS (EXAMPLES) <p>The learner will:</p> <ul style="list-style-type: none"> Identify images, pictures or items that are symbols of America Name the American flag State that George Washington was the first President Discuss the first Thanksgiving 	SUPPORTIVE PRACTICES <p>The adult will:</p> <ul style="list-style-type: none"> Display the American flag in the classroom Recite the Pledge of Allegiance daily Display pictures of American symbols Read books that relate to symbols of America Discuss holidays that relate to America

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

BIG IDEA: Citizenship involves responsibility to myself and others.

ESSENTIAL QUESTIONS: Can I describe some jobs I must do at school? Can I apply conflict resolution strategies? What do I do as a leader? How do I show examples of good citizenship at school?

5.2.1 CIVIC RIGHTS, RESPONSIBILITIES AND DUTIES	STANDARD STATEMENT <ul style="list-style-type: none"> Identify responsibilities at school Participate in activities that support the life of the classroom and/or school Identify community workers that exist in most or all communities 	EXEMPLARS (EXAMPLES) <p>The learner will:</p> <ul style="list-style-type: none"> Demonstrate the ability to maintain personal materials in an orderly manner Respect the space and materials of others in the classroom or school Help care for class and school equipment, tools, materials and environment Participate in group decision-making Work cooperatively with other children to achieve an outcome Name community agencies and workers that protect us or keep us healthy, such as fire fighters and police and hospitals, doctors and nurses 	SUPPORTIVE PRACTICES <p>The adult will:</p> <ul style="list-style-type: none"> Define the expectations in the classroom Model and reinforce how to care for classroom and personal materials Give students classroom jobs and responsibilities Engage children in class meetings and decision-making Provide cooperative learning activities
---	---	--	--

CONTINUED...

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

5.2.2 SOURCES AND RESOLUTION OF CONFLICT	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the sources of conflict and disagreement and different ways conflict can be resolved 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> State the cause of a problem Suggest solutions for a problem Continue to attempt to solve a problem until a solution is successful 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide instruction in conflict resolution strategies Provide support at children work together to resolve a problem Use questions to enhance and expand children's thinking about problems
5.2.3 POLITICAL LEADERSHIP AND PUBLIC SERVICE	STANDARD STATEMENT <ul style="list-style-type: none"> Participate in leadership opportunities in the classroom 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Accept job responsibilities Offer to assist the teacher or another student 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide children with job responsibilities within the classroom Ask for assistance from children
5.2.4 COMPETENT AND RESPONSIBLE CITIZENS	STANDARD STATEMENT <ul style="list-style-type: none"> Describe how to be a responsible member of a class or other group to which one belongs 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Share examples of good citizenship and responsibility at school Recite a bully free pledge 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Recognize children who demonstrate traits of good citizenship and character Encourage children to participate in cooperative games and play Use "what if" situations to help children consider appropriate behaviors and responses Support a bully free class and school

STANDARD 5.3: HOW GOVERNMENT WORKS

BIG IDEA: Organizations have leaders.

ESSENTIAL QUESTION: How do I identify the roles of specific adults in my school or community?

5.3.1 BRANCHES OF GOVERNMENT	STANDARD STATEMENT <ul style="list-style-type: none"> Identify positions of authority at school and community Describe the roles of students, teachers and administrators 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify the principal, teachers, guidance counselor as people in authority at school Identify police officers and firemen as people in authority in the community Model these people in play 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about the roles of the principal, guidance counselor, school nurse, etc. and what they do at school Invite police officers and firemen to visit to explain their work and how they keep us safe Observe play situations to correct misinterpretations of roles Visit the principal's office Read books about the people who work at the school or in the community
------------------------------	--	---	---

STANDARD 6.1: ECONOMIC SYSTEMS

BIG IDEA: People work in our community.

ESSENTIAL QUESTIONS: Can I determine how to divide and distribute things evenly? Can I describe how community jobs are the same and different?

6.1.2 TRADITIONAL, COMMAND AND MARKET ECONOMIES	STANDARD STATEMENT <ul style="list-style-type: none"> Practice equal distribution 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Pass out an equal number of snack to all children Divide materials and toys evenly among those playing Correct the problem if one child has more or less than another 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Assist with determining how many are needed to have an equal number Discuss why everyone should have a fair share
6.1.3 MEASURES OF ECONOMIC	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the role of people in a community and what they do to make a living Describe why people work 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Match descriptions of people's work in a community with pictures illustrating the job Talk about the need to work and why each job is important Recognize how jobs are similar and different Listen to various stories about community helpers and various jobs 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Read books, both fiction and non-fiction, describing peoples' jobs Invite parents/community members to share their work Discuss the importance of work

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

BIG IDEA: Money and resources impact our life.

ESSENTIAL QUESTIONS: Can I define a product and who buys it? Can I name some coins and their values? Can I tell what I could buy at a specific location? Can I talk about what an advertisement is?

6.2.1 MARKET TRANSACTIONS	STANDARD STATEMENT <ul style="list-style-type: none"> Define goods and consumers 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Give examples of goods and consumers Give examples of how people can be both buyers and sellers of goods and services 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Introduce the vocabulary terms goods and consumers Talk about the types of things people buy Talk how people acquire items Talk about who needs certain products Read books about factories, farms, and other producers of goods Take a field trip to see production of an item
6.2.3 FUNCTION OF MONEY	STANDARD STATEMENT <ul style="list-style-type: none"> Identify and practice using money 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify some coins and values Identify some paper currency Use "money" or tokens to purchase items 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Discuss names of coins and currency Discuss values and which are worth more/less Develop a classroom store where children have the opportunity to make purchases from a selection of materials

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

6.2.5 CHANGES IN SUPPLY AND DEMAND	STANDARD STATEMENT <ul style="list-style-type: none"> Develop an understanding of how goods and services are produced and distributed 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Recognize that goods are purchased with money Begin to understand limitations for purchases (Don't always have enough money to buy something) Discuss the difference between goods and services 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Compare a good to a service Make a list of services that can be purchased such as haircuts, dry cleaning, repair work Talk about how goods are distributed such as trucks and trains Provide literature about goods and services Provide props and costumes in the dramatic play area to create a hair salon or a workshop
6.2.11 IMPACT OF MEDIA ON THE COST AND BENEFITS OF DECISIONS	STANDARD STATEMENT <ul style="list-style-type: none"> Define an advertisement 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> State that advertisements encourage us to purchase goods or services Recognize advertisements in magazines, on TV or in the environment 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about commercials on TV or billboards in the environment that encourage us to purchase things Provide advertisements from magazines or newspapers for children to identify Talk about the purposes of advertisements and encourage children to think about them in terms of wants or needs

STANDARD 6.3: SCARCITY AND CHOICE

BIG IDEA: There is a difference between wants and needs and how we acquire items.

ESSENTIAL QUESTIONS: Can I tell if I need or want something? Can I distribute items fairly? Do I notice that items are becoming limited before they run out?

6.3.1 SCARCITY AND LIMITED RESOURCES	STANDARD STATEMENT <ul style="list-style-type: none"> Distinguish between wants and needs and how money or materials should be used 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify resources that help us provide for our wants and needs Identify how those items are acquired Determine a want or a need 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about ways to get more resources if needed Create a list of limited resources Compare wants and needs Provide tokens for children to vote on acquiring items wanted or needed
6.3.3 ALLOCATION OF RESOURCES	STANDARD STATEMENT <ul style="list-style-type: none"> Practice distributing items fairly Notice when materials are becoming limited 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Distribute resources fairly when other child(ren) need something Indicate to teacher that materials such as paper or pencils are becoming limited and need to be replenished 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide enough resources for children working in an area Encourage children to think about how to get more resources if needed Indicate that a resource was limited but now has been replenished

STANDARD 6.4: ECONOMIC INTERDEPENDENCE

BIG IDEA: Trade is a way to distribute and receive materials.

ESSENTIAL QUESTIONS: How do I trade fairly?

6.4.2 TRADE	STANDARD STATEMENT <ul style="list-style-type: none"> Trade materials based on wants and needs 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Trade toys or materials for others that are wanted or needed 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Talk about fair trading Encourage children to trade items when resources are limited
--------------------	--	--	---

STANDARD 6.5: WORK AND EARNINGS

BIG IDEA: People work to earn money.

ESSENTIAL QUESTIONS: Can I explain why people work? Can I explain what things I might buy at a specific location? How do I save money for a purpose?

6.5.1 FACTORS INFLUENCING WAGES	STANDARD STATEMENT <ul style="list-style-type: none"> Explain that adult earns money from working to buy things that are wanted or needed Describe that different jobs pay different amounts of money 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Explain that people work to earn money State that this money is used to buy things that are wanted or needed 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Reinforce the idea that we work to get money Support the idea that money to buy items comes from this work Talk about how we buy things that we want and how we buy things that we need Indicate that people do many different kinds of jobs to earn money
--	--	---	---

6.5.3 TYPES OF BUSINESSES	STANDARD STATEMENT <ul style="list-style-type: none"> Define types of businesses 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Explain the kinds of things that could be purchased at a grocery store, toy store, book store, etc. Create a business in a play situation 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Plan a tour of the community to highlight businesses and how they serve the community Provide props and materials to create businesses in the dramatic play area
----------------------------------	--	--	---

6.5.7 COSTS AND BENEFITS OF SAVING	STANDARD STATEMENT <ul style="list-style-type: none"> Identify what might be purchased by saving money 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify reasons people might save money for the future 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Practice saving money Talk about why people save money Encourage children to save money to buy special items Take a field trip to a bank to learn more about saving
---	--	---	--

STANDARD 7.1: BASIC GEOGRAPHIC LITERACY

BIG IDEA: Each individual is a member of a larger community.

ESSENTIAL QUESTIONS: Can I identify and use maps and globes? How do I identify landmarks in my community?

7.1.1 GEOGRAPHIC TOOLS	STANDARD STATEMENT <ul style="list-style-type: none"> Identify the following geographic tools: map, globe and photographs 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify a map as a tool to locate familiar places or objects within the classroom or school environment Identify a globe Look at photos of places, regions and landforms to identify what object or place is located near some other object or place Make maps using blocks or paper and pencil to represent familiar places such as the classroom, the school playground or home 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Practice using a map to get to the bathroom, the playground, the office, the cafeteria Create scavenger hunts with map-based clues Note areas and countries of the world on the globe when possible Use photos to support understanding of using landmarks to locate other places Provide materials and samples for children to create maps independently
7.1.2 PLACES AND REGIONS	STANDARD STATEMENT <ul style="list-style-type: none"> Describe the types of homes and businesses located in the community 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Describe if dwelling is apartment, house, mobile home, type of business State information about the park, playground or other friends' homes Indicate landmarks or other identifying features of areas such as stream, flagpole, church or trees 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Compare and contrast types of homes and businesses Talk about favorite places to visit Create a class map including student homes and important landmarks Take a walking field trip around the community to observe types of homes and businesses

STANDARD 7.2: PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: Every location can be described by its physical characteristics.

ESSENTIAL QUESTIONS: Can I locate places based on a description? How can I create representations of places?

7.2.1 PHYSICAL CHARACTERISTICS	STANDARD STATEMENT <ul style="list-style-type: none"> Locate and discuss places in the home, school and community 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Respond to pictures by describing the physical characteristic Create representations of places using drawing, clay, cardboard Answer questions about a trip or a place that's been visited 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Take a walking field trip around the school and local community Provide pictures of many locations Display books that have picture of different places on earth and different homes
--------------------------------	---	--	---

STANDARD 7.3: HUMAN CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: All humans have similarities and differences.

ESSENTIAL QUESTIONS: How do I respect and appreciate others' differences?

7.3.1 HUMAN CHARACTERISTICS

STANDARD STATEMENT

- Describe how individuals are unique and special
- Compare and contrast customs of families in communities around the world

EXEMPLARS (EXAMPLES)

The learner will:

- Create drawings of family members and friends that show unique characteristics of individuals and describe their characteristics
- Write "I like you because..." notes to others
- Show understanding and respect for diverse customs and practices
- Share information about family customs

SUPPORTIVE PRACTICES

The adult will:

- Provide skin tone crayons and markers for children to use
- Create a Student of the Week display to recognize the unique contributions and skills of each child
- Make graphs about children's interests, likes and dislikes
- Include multicultural materials throughout the classroom, including books, dolls, dress-up materials and props, art materials, posters
- Invite parents or community members to share information about their culture

STANDARD 7.4: INTERACTIONS BETWEEN PEOPLE AND THE ENVIRONMENT

BIG IDEA: People and the environment affect each other.

ESSENTIAL QUESTIONS: Can I describe how changes in the environment affect me and others? Can I show that I know how to use basic technology?

7.4.1 IMPACT OF PHYSICAL SYSTEMS ON PEOPLE

STANDARD STATEMENT

- Identify how environmental changes can impact people

EXEMPLARS (EXAMPLES)

The learner will:

- Discuss how the temperature gets warmer or colder as the seasons change
- Explain what people do or wear in different types of seasons
- Explain what transportation is appropriate in different kinds of weather or environment
- Talk about the change in walking to school because of a sidewalk being replaced
- Gather items to be recycled

SUPPORTIVE PRACTICES

The adult will:

- Read books about weather both fiction and non-fiction
- Provide seasonal clothing and props in the dramatic play area
- Discuss various forms of transportation and how they are suitable for certain weather conditions or types of travel
- Include various types of vehicles in the block corner such as cars, trucks, planes, trains, buses, fire engines
- Show examples of work in the community and the changes it makes such as repaving roads or planting trees

7.4.2 IMPACT OF PEOPLE ON PHYSICAL SYSTEMS

STANDARD STATEMENT

- Understand that people can use technology to complete tasks

EXEMPLARS (EXAMPLES)

The learner will:

- Use a computer to create a picture or written document
- Use a tape recorder to record a story or song

SUPPORTIVE PRACTICES

The adult will:

- Allow children to use word processing or graphic programs on the computer
- Provide technological devices for students' independent use

STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

BIG IDEA: Past and present experiences and ideas help us make sense of the world.

ESSENTIAL QUESTIONS: How do I use a timeline to show changes over time? What do I know about families of the past and how do they compare to families today? Can I locate information to answer questions I have?

8.1.1 CONTINUITY AND CHANGE OVER TIME	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Understand chronological thinking through days, weeks, months, years (calendar time) 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Create a personal timeline with photographs or drawings from birth to present Practice past, present and future time with a classroom calendar and daily weather recording Sequence photos of events Pretend to be characters with events occurring over a period of time 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Use a class calendar to chart the date and weather Provide opportunities for grandparents and senior citizens to visit the classroom to provide “living history” Provide photographs of events for sequencing Provide costumes and props for many ages and stages of development
--	---	--	---

8.1.2 HISTORICAL COMPREHENSION AND INTERPRETATION	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Compare children and families of today with those in the past 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Recognize clothing, houses and objects from the past or from the present 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Dramatize stories from history with children Invite re-enactors to visit the classroom Read books that are set in different periods of history
--	--	--	--



8.1.3 RESEARCH	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Know where to go to locate information 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Use books, computers and other sources to get information about a topic 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide books, pictures and authentic objects on a theme Model going to the library to get information about a question Provide multimedia information about a theme
-----------------------	---	---	--

SOCIAL STUDIES THINKING GLOSSARY



CIVICS AND GOVERNMENT

Authority – Right to control or direct the actions of others, legitimized by law, morality, custom or consent

Citizen – Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government

Community – A group of people who share a common social, historical, regional or cultural heritage

Conflict Resolution – The process of attempting to solve a dispute or conflict

Country – The acceptable political boundaries or borders recognized throughout the world

Decision-making Process – An organized approach to making choices

Government – Institutions and procedures through which a territory and its people are ruled

Leadership – State or condition of one who guides or governs

State – A commonwealth; a nation; a civil power

ECONOMICS

Community Helpers – Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firemen, policemen, trash collectors, animal control officers

Competition – The rivalry among people and/or business firms for resources and/or consumers

Consumer – One who buys or rents goods or services and uses them

Cost – What is given up when a choice is made; monetary and/or non monetary

Demand – The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various prices during a specific time period

Goods – Objects that can satisfy people's wants

Household – The group of people living together under one roof; a group of individuals whose economic decision-making is interrelated

Money – A medium of exchange

Natural Resource – Anything found in nature that can be used to produce a product (e.g., land, water, coal)

Price – The amount people pay in exchange for a particular good or service

Producer – One who makes goods or services

Profit – Total revenue minus total costs

Services – Actions that are valued by others

Supply – The different quantities of a resource, good or service that potential sellers are willing and able to sell at various prices during a specific time period

Wants – Desires that can be satisfied by consuming goods, services or leisure activities

GEOGRAPHY

Climate – Long-term patterns and trends in weather elements and atmospheric conditions

Culture – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing

Environment – Everything in and on Earth's surface and its atmosphere within which organisms, communities, or objects exist

Geographic Tools – Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs)

Place – An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas

Resource – An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value



HISTORY

Conflict – The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

Document – A formal piece of writing that provides information or acts as a record of events or arrangements

Media Sources – Various forms of mass communication such as television, radio, magazines, newspapers and internet

HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

LEARNING ABOUT MY BODY



Children's future health and well-being are directly related to the development and strengthening of their gross and fine motor muscles. Children must have opportunities to experience active indoor and outdoor play in which they can use their bodies to explore the environment while acquiring muscle control, balance, coordination, strength, eye-hand coordination and other related skills. Health and safety activities must be integrated throughout the day as teachers model healthy and safe practices and promote healthy lifestyles for children.

GET UP AND MOVE!



Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children's healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in outdoor play, weather permitting. Including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain good healthy choices and habits influence children's ongoing development and school success.



Standard	Page
10.1-3: Healthy and Safe Practices.....	58
10.4: Physical Activity: Gross Motor Coordination	60
10.5: Concepts, Principles and Strategies of Movement: Fine Motor Coordination.....	61

STANDARD 10.1–3: HEALTH AND SAFE PRACTICES

THIS STANDARD HAS BEEN COMBINED AND IS ALIGNED TO THE GRADES 3–12 STANDARDS 10.1 AND 10.3.

BIG IDEA: Children need to make healthy choices, physically and nutritionally, to optimize their learning potential.

ESSENTIAL QUESTIONS: What are things I can do to keep myself healthy and safe? Can I identify ways to help my body develop? What are some healthy foods?

10.1–3.1 FUNDAMENTALS OF GOOD HEALTH	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> • Demonstrate basic hygiene routines independently • Discuss the role hygiene plays in keeping us healthy • Identify how to use medicine safely • Describe how fundamental practices keep us healthy • Describe the people, practices and tools that keep us healthy 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> • Wash own hands, brush teeth, cover nose and mouth when sneezing, comb own hair • Describe ways germs can be spread • Identify signs of illness such as fever, headache, stomach ache, vomiting or diarrhea • Explain how germs can make someone ill • Identify adults who can give medicine • Demonstrate how to say “No” to drugs • Explain how rest, exercise and good nutrition can keep us healthy • Identify tools and practices that doctors and dentists use to keep us healthy 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> • Provide opportunities in daily schedule for completion of hygiene routines • Create learning centers that focus on healthy hygiene practices (tooth brushing, flossing teeth) • Discuss signs of illness • Show how germs spread • Read literature related to good hygiene • Read literature related to decision making, saying “No”, healthy choices or risk-taking • Reinforce concepts with posters and verbal support • Role-play saying no to drugs • Provide examples of healthy meals • Display the food pyramid • Encourage children to rest to help their bodies stay healthy • Identify tools that doctors and dentists use • Discuss or role play the procedures doctors and dentists use to keep us healthy
10.1–3.2 BODY AWARENESS	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> • Describe function of basic body parts and organs • Relate how healthy practices support body development and function 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> • Name and point to body parts • Name and point to where the organs are located in the body • Describe the basic functions of the body organs • Explain why we need rest, good nutrition and exercise to stay healthy • Discuss what is meant by being and feeling healthy 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> • Point to and name different body parts • Make outlines of body and add different body parts • Read books about the body organs • Read books about healthy practices and images • Discuss the concepts of rest, exercise and good eating related to good health • Encourage children to engage in healthy practices

CONTINUED...

STANDARD 10.1-3: HEALTH AND SAFE PRACTICES

10.1-3.3 SAFE PRACTICES

STANDARD STATEMENT

- Demonstrate and describe the importance of rules to ensure safety
- Explain how to modify behavior to assure safe practice
- Describe the people, practices and tools that keep us safe

EXEMPLARS (EXAMPLES)

The learner will:

- Demonstrate fire safety practices and emergency procedures
- Demonstrate safe ways to answer the phone
- Explain how to be safe when walking, riding bicycles, and riding in vehicles
- Demonstrate playground rules
- Describe things in the environment that can be harmful (loud noise, tobacco, smoke, pollution, temperature, insects)
- Describe ways to protect oneself from harmful factors in the environment
- Clean up areas for safety
- Follow directions during fire drills
- Be aware of others on playground
- Cross street at intersection
- Explain the role of fire fighters, police, ambulance drivers, etc.
- Identify the tools that fire fighters, police, ambulance drivers use to keep us safe

SUPPORTIVE PRACTICES

The adult will:

- Talk with children about harmful substances and objects
- Talk about and practice crossing street
- Practice making "911" calls
- Demonstrate and practice "STOP DROP ROLL" and emergency procedures
- Engage learners in interactive activities to first identify the harmful factors and then find ways of protection
- Encourage the use of sunscreen
- Provide positive reinforcement while children put away toys
- Provide reminders and support about safe practices in the classroom and on the playground
- Read books about being safe
- Arrange for field trips and visitors to demonstrate their jobs
- Read books about safety workers



10.1-3.4 NUTRITION

STANDARD STATEMENT

- Identify how specific foods keep us healthy
- Identify the foods to include in specific food groups

EXEMPLARS (EXAMPLES)

The learner will:

- Classify food as nutritious or not nutritious
- Identify water as an important resource for keeping the body healthy
- Identify food groups
- Identify foods that belong together in a specific food group
- Design a meal using foods from several groups

SUPPORTIVE PRACTICES

The adult will:

- Discuss nutritious and non-nutritious foods
- Discuss how food supports healthy growth and development
- Read books about healthy foods
- Use "Color Me Healthy" program
- Model drinking water
- Display food pyramid
- Provide cooking and food experiences
- Provide materials for children to play healthy meals using foods from several groups

STANDARD 10.4: PHYSICAL ACTIVITY: GROSS MOTOR COORDINATION**BIG IDEA:** Children gain control over their bodies and body movements through active experiences and exploration.**ESSENTIAL QUESTIONS:** Can I regularly demonstrate a variety of large motor movements? Can I show coordination of muscles as I engage in play?

10.4.1 CONTROL AND COORDINATION	STANDARD STATEMENT <ul style="list-style-type: none"> Engage in independent large motor skills with control and coordination Demonstrate coordination of purposeful body movements Start and stop with control Perform movement skills in team or group games 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Hit a stationary target with an overhand throw Catch a ball with increasing accuracy Pull or push wheeled toys Ride and steer a toy using feet to pedal Use outdoor gross motor equipment such as swings, climbers and tunnels safely and appropriately Reach around or over to retrieve an object Move body to represent something else Begin running without difficulty and stop running when intended Participate in group games like Follow the Leader, tag or kickball to use skills 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide stationary marked targets Play catch games with children Include toys and equipment that encourage active play Provide areas on the playground for riding toys to be used safely Ensure riders wear helmets Ask children to create numbers and shapes with their bodies Ask children to retrieve objects that require coordinating muscles Provide time and space for children to run Include group and team games regularly
10.4.3 BALANCE AND STRENGTH	STANDARD STATEMENT <ul style="list-style-type: none"> Exhibit balance, strength, stamina and agility while engaged in active play Use mastered gross motor movements to learn new skills and engage in new activities 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Walk on a balance beam forward and backward Walk up and down stairs using alternating feet without help Gallop, run, hop, jump, start and stop with ease Jump forward Jump on one foot at a time Participate in group games Kick a ball with increasing accuracy Use throwing, catching, kicking and running in new games and when encountering new challenges 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide opportunities to participate in a variety of motor activities including sway, stretch, pull, push, bend, squat Provide many practice opportunities Model new skills Introduce games such as kickball

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

BIG IDEA: Fine motor practice helps children develop eye–hand coordination, strength and controlled use of tools.

ESSENTIAL QUESTIONS: How do I use my hands to develop self–help skills? How do I develop eye–hand coordination? How well do I control my fine muscle movements?

10.5.1 STRENGTH, COORDINATION AND MUSCLE CONTROL	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> • Use dexterity to manipulate objects • Demonstrate control and strength • Complete manual self help skills independently • Perform clapping and hand games with or without a partner • Put together puzzles using picture and shape clues 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> • Use scissors to cut on a line turning paper as needed • Manipulate dough and clay by squeezing, pounding, rolling into recognizable shapes, objects and letters • Manipulate pegs into a pegboard • Tear paper with skill • String beads, noodles, or cereal onto a string in a peg board • Trace forms or templates • Open and close markers • Open and close glue bottles • Trace a line or circle • Pound pegs • Complete self help skills (zipping, snapping, buttoning, tying) • Engage in clapping games like Miss Mary Mack or Say, Say My Playmate • Complete multiple piece puzzles 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> • Encourage accuracy when cutting and tracing • Provide paper for drawing and tearing • Provide opportunities and materials to play with playdough • Provide beads and strings to make necklaces • Provide pegs, pegboards and hammers • Ensure that children are closing markers and glue bottles completely • Provide opportunities to use pencils, crayons and scissors • Provide opportunities to practice zipping, buttoning, snapping • Teach hand and clapping games • Provide a variety of multi–piece puzzles
10.5.2 EYE/HAND COORDINATION	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> • Copy structure from a model or plan using a variety of block types and sizes • Measure amounts of sand or water using tools • Handle books with manual dexterity 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> • Use a variety of blocks to build a recognizable structure following a model or a plan • Use measuring tools to move sand and liquid • Hold book correctly • Turn single pages at the top using thumb and forefinger 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> • Provide different types and sizes of blocks • Provide books and pictures of a variety of structures • Provide sensory experiences (water and sand play) where children can pour, fill and empty • Provide measuring cups and spoons • Model correct book handling skills

CONTINUED...

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT *continued*

10.5.3 USE OF TOOLS	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	<ul style="list-style-type: none"> Demonstrate control with writing and drawing implements to draw pictures, letters and words Use tools with control and skill to perform basic tasks Choose appropriate tool for a specific task 	<p>The learner will:</p> <ul style="list-style-type: none"> Hold pencils, crayons, and markers in a functional grasp (pincer grasp) Use glue sticks or liquid glue to paste various items Use paint brushes to make pictures Use fork, spoon accurately Attempt to use knife correctly Use watering can, dustpan and brush and empty pencil sharpener into garbage can to complete classroom responsibilities 	<p>The adult will:</p> <ul style="list-style-type: none"> Provide a variety of art and writing materials and experiences that offer manipulative practice (finger paint, play dough, paint with brushes, crayons, markers, pencils and paper, collage materials and safety scissors) Provide opportunities for children to select and use tools and items to complete classroom responsibilities

HEALTH, WELLNESS & PHYSICAL DEVELOPMENT GLOSSARY

Agility – A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy

Balance – A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving

Coordination – A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately

Developmental Differences – Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners' developmental status will affect their ability to learn or improve

Developmentally Appropriate – Motor skill development and change that occur in an orderly, sequential fashion and are age and experience related

Directions – Forward, backward, left, right, up, down

Flexibility – A health-related component of physical fitness that relates to the range of motion available at a joint

Food Guide Pyramid – A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America

Health – A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity

Health Education – Planned, sequential PK-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health

Locomotor Movement – Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop

Motor Skills – Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (e.g., tennis serve, shooting a basketball)

Movement Skills – Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities

Nonlocomotor Movement – Movements that do not produce physical displacement of the body

Physical Activity – Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure

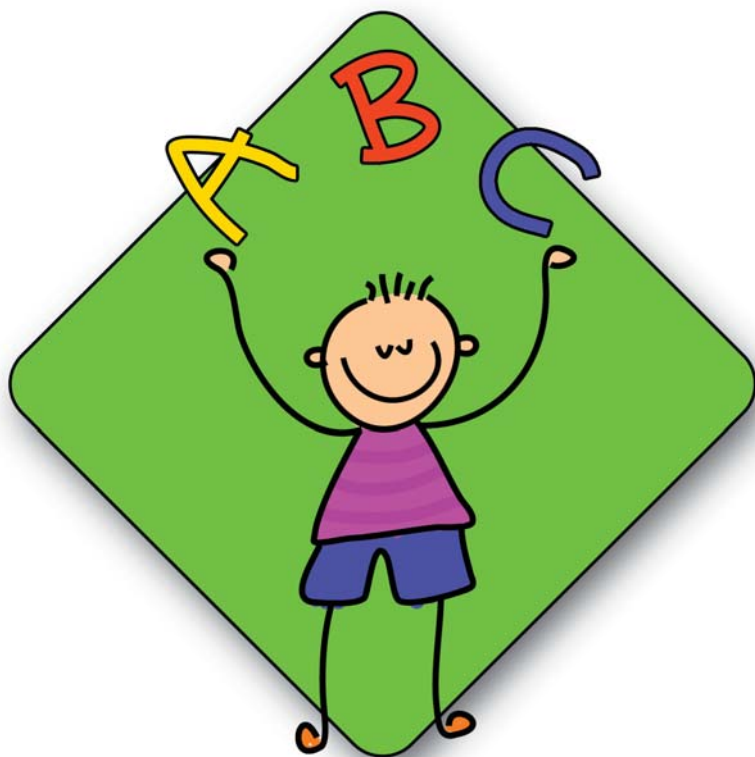
Physical Education – Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life

Physical Fitness – A set of attributes that people have or achieve and that relate to their ability to perform physical activity. Generally accepted to consist of health-related fitness and skill-related fitness

Safety Education – Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury

LANGUAGE AND LITERACY DEVELOPMENT

EARLY LITERACY FOUNDATIONS; READING, WRITING, SPEAKING AND LISTENING



ommunication occurs in many different ways. It is a way to share one's ideas and understand the ideas of others.

Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming stories and songs and engaging in word play activities.

INCLUSIVE CLASSROOMS



arly childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying classroom experiences alongside their typically developing peers. Teachers, specialists, and families must work together to understand all children's unique needs while adapting teaching strategies, materials and/or environment to assure that every child can learn and develop to his/her highest potential. Adults must celebrate all children's accomplishments and appreciate what children can learn and do.

Standard

Page

1.1	Learning to Read Independently	64
1.2	Reading, Analyzing, and Interpreting Text.....	66
1.3	Reading, Analyzing, and Interpreting Literature	67
1.4	Types of Writing.....	68
1.5	Quality of Writing.....	68
1.6	Speaking and Listening	69
1.7	Characteristics and Function of the English Language ..	70
1.8	Research	71
1.9	Information, Communication, and Technology Literacy	71

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

BIG IDEA: Emerging reading involves the use of pictures, symbols and text to gain information and derive meaning.

ESSENTIAL QUESTIONS: How do I select text to learn about specific information? Do I read for a variety of purposes? How do I recognize new words in print? How can I build vocabulary? How do I read to learn and understand information?

1.1.1 PURPOSES FOR READING**STANDARD STATEMENT**

- Read text for a variety of purposes during work and playtime
- Choose text based on identified need and purposes
- Identify different purposes for text

EXEMPLARS (EXAMPLES)

The learner will:

- Select books, tapes and poems on the basis of personal choice/interest or teacher-criteria
- Use magazines, catalogs, circulars, mail, books to locate words and /or sentences or to just peruse
- Explain that text has different purposes such as books, signs, lists, charts or menus

SUPPORTIVE PRACTICES

The adult will:

- Use big books, messages, charts, letters, notes and signs to share information
- Provide daily opportunities for learners to look at and read books, daily messages, charts, posters, and magazines
- Read and reread quality literature daily
- Assist learners in reading classroom labels, signs and other environmental and classroom print
- Provide learning centers and classroom library where learners can independently interact with quality literature books
- Provide opportunities for learners to practice how print works

1.1.2 WORD RECOGNITION SKILLS**STANDARD STATEMENT**

- Identify upper and lower case letters
- Associate the names of letters with their shapes and sounds
- Create words and letters
- Identify and produce a variety of patterned words
- Segment and blend sounds into words
- Identify basic sight words
- Decode and encode words in context

**EXEMPLARS (EXAMPLES)**

The learner will:

- Identify letters, both upper and lower case and make letter and sound correspondence
- Write dictated letters and words
- Substitute sounds to form new words in word families or follow an alliterative pattern
- Isolate initial consonant sounds in single syllable words
- Segment individual phonemes in a single syllable word
- Blend letters and sounds
- Identify own name and names of class
- Read basic sight words from word wall
- Use decoding and encoding skills to read or write words in context

SUPPORTIVE PRACTICES

The adult will:

- Create learning centers to reinforce letter and sound identification skills
- Encourage children to write letters and sounds that they hear
- Model segmenting learners' names and other words
- Provide practice with blending sounds daily
- Point out words from vocabulary, calendar, lunch menu, names, word wall throughout the day
- Support encoding and decoding with scaffolding

CONTINUED...

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued**1.1.3 VOCABULARY DEVELOPMENT****STANDARD STATEMENT**

- Describe pictures in detail using sentences
- Discuss unknown words and word meanings
- Recognize vocabulary words in print
- Use new vocabulary in spoken and written language

EXEMPLARS (EXAMPLES)**The learner will:**

- Name, describe and talk about new concepts
- Request further information about a concept by using the correct name, label or vocabulary word
- Engage in conversation with a variety of partners
- Identify designated words in a variety of text, such as word walls, messages, poems, or room labels
- Practice reading words on word walls
- Use new vocabulary to ask questions
- Use new vocabulary in the context of dramatic play, daily routines and classroom conversations
- Use new vocabulary during daily writing, talking or reading

SUPPORTIVE PRACTICES**The adult will:**

- Model rich spoken language
- Provide explicit instruction of key vocabulary words in context
- Create a word wall of sight words and frequently used words
- Provide opportunities for learners to read and identify common reading words within a variety of texts
- Provide opportunities for learners to explore and apply new sight words during shared reading, small group instruction, independent reading and learning centers
- Provide exposure to new vocabulary in various contexts such as read alouds, class discussions, spoken listening activities and computers
- Encourage and support learners as they expand their use of language during play and peer interactions and conversations

1.1.4 COMPREHENSION AND INTERPRETATION**STANDARD STATEMENT**

- Respond appropriately to directions, stories and conversations
- Describe illustrations showing action
- Retell and summarize a story
- Restate main ideas and important details from a story
- Draw connections between story events, personal experiences and other books
- Answer “why” questions

EXEMPLARS (EXAMPLES)**The learner will:**

- Follow directions, answer a question about a story or engage in a conversation
- Explain action that is occurring in an illustration
- Retell beginning, middle and ending story events
- Relate how personal experiences or other stories connect to a new book
- Identify basic facts and main ideas in a text
- Use basic facts to answer questions

SUPPORTIVE PRACTICES**The adult will:**

- Provide opportunities for retelling
- Provide a variety of books for selection
- Ask probing questions
- Model connections between story events and background knowledge of students
- Model connections among books

1.1.5 FLUENCY**STANDARD STATEMENT**

- Repeat modeled sentences after teacher
- Read phrases grouped by teacher
- Use phonics to decode words while reading
- Practice oral reading
- Recognize common sight words with automaticity

EXEMPLARS (EXAMPLES)**The learner will:**

- Repeat a fluent sentence after the teacher using inflection and pacing
- Read phrases indicated by the teacher through chunking
- Apply knowledge to decode unknown words
- Read aloud daily to increase fluency
- Practice sight words

SUPPORTIVE PRACTICES**The adult will:**

- Provide opportunities for learners to practice reading with fluency such as rereading familiar texts
- Model reading with fluency
- Chunk phrases for children to practice
- Encourage students to read along during shared reading
- Expose learners to repeated readings of big books, daily message, poems, charts, songs, fingerplays

STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT

BIG IDEA: Children understand and respond to a wide variety of text.

ESSENTIAL QUESTIONS: How do I identify the parts of books and stories? How do I use a variety of texts to learn new information? How do I make predictions about a variety of texts?

1.2.1 TEXT ANALYSIS AND EVALUATION**STANDARD STATEMENT**

- Identify common features of text
- Compare and contrast characters
- Identify setting of a story
- Identify problem and solution of a story
- Compare new and familiar books and stories

EXEMPLARS (EXAMPLES)

The learner will:

- Identify title, author and illustrator
- Explain how characters are the same and different in a story
- Draw the setting of a story
- Identify the problem in a story and its solution
- Discuss the similarities amongst books

SUPPORTIVE PRACTICES

The adult will:

- Ask children to identify and define the title, author and illustrator of a book
- Use Venn diagrams to compare and contrast characters
- Create murals and pictures of story settings
- Discuss problems and solutions in stories and talk about alternate solutions
- Provide a variety of texts in the classroom library

1.2.2 TEXT ORGANIZATION**STANDARD STATEMENT**

- Develop book/print awareness
- Track consistently and correctly when reading or following along
- Identify beginning, middle and end of a story or book
- Identify the various types of text and their purpose

EXEMPLARS (EXAMPLES)

The learner will:

- Turn pages from left to right when reading, read words and sentences from left to right, read from top to bottom and use return sweep
- Illustrate, write or tell what happens at the beginning, middle or end of a story
- Distinguish between different forms of text such as lists, letters, poems, charts, illustrations and the functions they serve

SUPPORTIVE PRACTICES

The adult will:

- Model appropriate book handling skills
- Model and reinforce correct tracking
- Encourage children to identify beginning, middle and end
- Create lists of types of text
- Discuss types of text and share examples of each
- Provide a variety of text in play areas

1.2.3 FACT AND OPINION**STANDARD STATEMENT**

- Identify facts in a selection
- Determine important facts from informational text

EXEMPLARS (EXAMPLES)

The learner will:

- Identify pieces of a selection that are fact rather than fantasy or opinion
- Retell some important facts from a read text or from information heard

SUPPORTIVE PRACTICES

The adult will:

- Model and provide examples of facts
- Model identifying facts in informational text
- Provide a variety of opportunities for children to determine facts from text
- Provide ample time for exploration of a variety of texts during center time

1.2.5 INFERENCES**STANDARD STATEMENT**

- Make predictions about story content using prior knowledge, title, illustrations and story sequence
- Explain whether or not predictions are confirmed

EXEMPLARS (EXAMPLES)

The learner will:


- Make a prediction about story content based on background knowledge and personal experiences
- Verify predictions made and give simple explanations

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for predicting and relating personal experiences
- Read a variety of texts for children to make predictions and relationships
- Ask open ended questions about text to encourage inference and prediction

STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE**BIG IDEA:** Literature consists of a variety of elements to convey meaning.**ESSENTIAL QUESTIONS:** How do I create different forms of text? How do I identify literary elements and devices?

1.3.1 ANALYSIS AND EVALUATION	STANDARD STATEMENT <ul style="list-style-type: none"> Compare and contrast books on a similar topic or by the same author 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Find similarities and differences among books on the same topic or by the same author 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide many opportunities for learners to read, listen to and discuss texts from a variety of genres and types as well as representing diverse cultures and ethnicities Create graphs and charts showing similarities and differences
1.3.2 LITERARY GENRES	STANDARD STATEMENT <ul style="list-style-type: none"> Create own examples of poetry, fiction and nonfiction with teacher support 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Attempt to create the genre of literature modeled in the classroom 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Expose children to a variety of genres and attach names to them Provide support and models for children when creating their own examples
			
1.3.3 LITERARY ELEMENTS	STANDARD STATEMENT <ul style="list-style-type: none"> Describe the people, places and things in a story Respond to questions and/or initiate conversation about main characters, setting, events or plot of a story 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Draw, write or tell about the people, places and things in a story Answer questions related to a text or engage in a conversation about components of the story 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Consistently identify the elements of text, such as the people, places and things Ask open-ended questions about the elements of a story
1.3.4 LITERARY DEVICES	STANDARD STATEMENT <ul style="list-style-type: none"> Recognize rhyming patterns and alliterations when text is read aloud Recognize different tones of stories 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Identify rhyming patterns and alliterations Begin to create rhyming patterns or alliteration examples Identify if the tone of a story is happy, sad, silly or frustrated 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Point out rhyming patterns and examples of alliteration while reading text Provide opportunities for learners to identify rhyming patterns and alliterations in text Discuss the tone of a story Discuss how the story makes reader feel

STANDARD 1.4: TYPES OF WRITING

BIG IDEA: Children write for different purposes and audiences.

ESSENTIAL QUESTIONS: How do I write for a variety of purposes and audiences?

1.4.1 NARRATIVE	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Create a simple story using age appropriate writing skills 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Write a story that includes character, simple plot or setting Use drawings and pictures to represent ideas Participate in group and shared writing experiences 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide opportunities throughout the school day for learners to engage in shared and interactive writing Model the writing process Brainstorm ideas for characters, setting, plot for stories to be written Provide opportunities and materials for learners to write throughout the day
1.4.2 INFORMATIONAL	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Communicate information through writing 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Write during play for a variety of purposes such as stories, lists, cards, or letters Write sentences about a non-fiction topic 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Create charts about children's ideas and topics Display informational text in various locations in the classroom, such as bulletin boards, children's sample display, and signs or labels

STANDARD 1.5: QUALITY OF WRITING

BIG IDEA: Writing conveys the author's ideas about a topic.

ESSENTIAL QUESTIONS: How do I use the conventions of writing to convey meaning? How do I review and edit my work?

1.5.1 FOCUS	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Write about one specific topic 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Write ideas or sentences about a specific topic that includes people, object, experience or event 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide writing time through the day Provide learners with opportunities to converse with classmates in group and paired settings about the topic
1.5.2 CONTENT	<p>STANDARD STATEMENT</p> <ul style="list-style-type: none"> Generate ideas and topics for writing Include details about topic when writing Match illustration to writing 	<p>EXEMPLARS (EXAMPLES)</p> <p>The learner will:</p> <ul style="list-style-type: none"> Brainstorm ideas for writing topics Share ideas with classmates Complete story starters Write stories with detail Ask questions to encourage the use of more detail in writing 	<p>SUPPORTIVE PRACTICES</p> <p>The adult will:</p> <ul style="list-style-type: none"> Provide learners with story starter ideas and model use Provide opportunities for learners to ask questions about writing Provide materials in learning centers for exploration of writing Provide word walls and other pertinent environmental print and assistive materials for learners to use when writing Ask questions to encourage the use of more detail in writing Provide opportunities throughout the school day for learners to generate ideas for writing

STANDARD 1.5: QUALITY OF WRITING continued

1.5.3 ORGANIZATION	STANDARD STATEMENT <ul style="list-style-type: none"> Write words or simple sentences in a logical order 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Write thoughts or words in logical sequence Begin to use graphic organizers to assist in organizing printed thoughts 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide learners with opportunities to sequence events or pictures Model, demonstrate, encourage and support learners as they begin to organize thoughts and words Provide encouragement and support writing efforts Model the use of graphic organizers
1.5.5 EDITING	STANDARD STATEMENT <ul style="list-style-type: none"> Examine beginning writing for errors with adult assistance Write pieces that reflect prior adult edits 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Begin to ask and answer questions about conventions of writing Share writing with classmates for feedback Use previous feedback in new writing 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Support learners in writing attempts Model the editing and revising process at appropriate level Provide opportunities for learners to share with one or more than one classmate in a variety of settings
1.5.6 CONVENTION	STANDARD STATEMENT <ul style="list-style-type: none"> Use a variety of writing tools and surfaces Demonstrate conventional penmanship Use correct spacing with scaffolding Include some punctuation with support 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Use pens, markers, pencils, crayons, paints, chalk, computer or other technology during work and play Trace copy or write upper case and lower case letters of the alphabet attending to the form proper spacing of the letters Begin to use appropriate spacing between letters, in height of letters, and position of letters Begin to use period and question mark correctly with assistance 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide a variety of materials for use in tracing, copying, forming, writing letters Model correct formation of letters in group settings Provide models of appropriate letter writing in centers and in classroom environment Purposely point out letter formations during group and individual lesson times

STANDARD 1.6: SPEAKING AND LISTENING

BIG IDEA: Speaking and listening are connected skills that build the foundation for literacy and communication.

ESSENTIAL QUESTION: How do I listen for meaning? How do I appropriately express my thoughts?

1.6.1 LISTENING SKILLS	STANDARD STATEMENT <ul style="list-style-type: none"> Initiate and respond appropriately to conversations and discussions Ask a series of questions to gather additional information Follow three-step directions 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> Demonstrates appropriate level of receptive language through appropriate responses to group conversations or discussions Ask follow up questions to initial question to get more detail Follow two and three step directions such as "Put away your book, get your jacket and stand by the door" on a regular basis without assistance 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> Provide opportunities and oral language experiences on a daily basis Ask questions in group and individual settings Model appropriate answers to given questions Provide opportunities for learners to ask questions for clarification or inquiry Provide learners with many opportunities to speak throughout the day
-------------------------------	---	--	--

STANDARD 1.6: SPEAKING AND LISTENING continued

1.6.2 SPEAKING SKILLS	STANDARD STATEMENT <ul style="list-style-type: none"> • Share experiences daily • Speak clearly enough to be understood by all audiences in complete, coherent sentences • Recite rhymes, songs, and familiar text • Ask and answer relevant questions 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> • Demonstrates appropriate level of expressive language • Speak in a voice loud enough for the audience to hear but not loud enough to be distracting • Articulate age appropriate speech sounds correctly • Verbally recite poems and finger plays with classmates and /or adult • Sing songs and/or chants with group • Express needs to clearly be understood 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> • Model modulating one's voice volume and intonation • Allow learners to talk about personal experiences, preferences and topics of interest • Model rich spoken language during classroom conversations • Encourage and support learners as they expand their use of language and confidence at speaking during group discussions and in front of others • Provide opportunities and support learners as they engage in teacher-planned and learner-initiated spontaneous conversations throughout the school day
1.6.3 DISCUSSION	STANDARD STATEMENT <ul style="list-style-type: none"> • Communicate using details when relating experiences and retellings of stories • Apply listening and speaking strategies during discussions of stories and events • Pose questions, listen to the ideas of others, and contribute own information in group discussion partner discussion 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> • Engages in conversation about books, stories, and/or experiences in ways understood by most listeners • Demonstrate the difference in the terms inside and outside voice • Participate appropriately in response to questions posed or information shared 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> • Ask a variety of questions to allow learners to practice communication skills • Model appropriate voice levels for inside and outside environments • Model respectful ways to participate in group or partner discussions
1.6.4 PRESENTATION	STANDARD STATEMENT <ul style="list-style-type: none"> • Deliver brief oral presentations about stories, familiar experiences and interests 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> • Share information such as facts in front of a familiar group of peers 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> • Model appropriate behavior and communication skills on a daily basis • Provide support and encouragement for learners' efforts in improving their communication skills

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE**BIG IDEA:** Information can be shared in many ways.**ESSENTIAL QUESTION:** How do I communicate in more than one way?

1.7.1 COMMUNICATING IN MORE THAN ONE LANGUAGE	STANDARD STATEMENT <ul style="list-style-type: none"> • Use verbal language supported by nonverbal gestures to communicate for a variety of purposes • Practice speaking a few words in a language other than native language • Relate meaning in native language to words in new language 	EXEMPLARS (EXAMPLES) The learner will: <ul style="list-style-type: none"> • Demonstrate in a verbal and nonverbal manner the answer to posed questions • Attempt to speak a foreign language heard • Connect the meaning of a word in foreign language with native language • Share ways communication can occur including various languages, technological devices, and gestures 	SUPPORTIVE PRACTICES The adult will: <ul style="list-style-type: none"> • Provide opportunities for learners to communicate with others in verbal and nonverbal ways • Provide opportunities and experiences for learners to know others communicate in languages foreign to them
--	--	--	--

STANDARD 1.8: RESEARCH

BIG IDEA: Information to answer questions is available through a variety of resources.

ESSENTIAL QUESTION: How do I find the answers to questions that interest me? How can I share learned information with others?

1.8.1 INQUIRY BASED PROCESS

STANDARD STATEMENT

- Ask questions on a variety of topics

EXEMPLARS (EXAMPLES)

The learner will:

- Ask questions about topics of personal interest or class-generated topics

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for learners to research topics

1.8.2 LOCATION OF INFORMATION AND CITING SOURCES

STANDARD STATEMENT

- Locate information on identified topics with teacher guidance

EXEMPLARS (EXAMPLES)

The learner will:

- Begin to search for information on specific topics using research materials with assistance

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for seeking information from research sources with assistance from adult or older children
- Provide access to books and materials for use in researching

1.8.3 ORGANIZATION AND PRODUCTION OF FINAL PRODUCT

STANDARD STATEMENT

- Produce a project based on research and explain with assistance

EXEMPLARS (EXAMPLES)

The learner will:

- Create a simple product based on research findings
- Share information learned through research with teacher support

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities to create projects using research materials with assistance
- Provide opportunities for learners to share their products

STANDARD 1.9: INFORMATION, COMMUNICATION AND TECHNOLOGY LITERACY

BIG IDEA: Technology provides access to new information.

ESSENTIAL QUESTIONS: How do I use technology to gain new information?

1.9.1 MEDIA AND TECHNOLOGY RESOURCES

STANDARD STATEMENT

- Use technology to gain information
- Use age appropriate computer program with little or no assistance

EXEMPLARS (EXAMPLES)

The learner will:

- Use technological devices such as a computer to gather information
- Use appropriate interactive software programs
- Use a new program with little or no assistance
- Choose a topic or specific computer program to practice related skills

SUPPORTIVE PRACTICES

The adult will:

- Continue to introduce new technology during group time and embed into learning centers
- Continue to model the appropriate care of technological devices
- Select software and internet websites that matches children's levels
- Provide classroom materials that promote use of technology
- Provide opportunities and support for learners as they use new computer programs and skills

LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY

Alliteration – The repetition of initial consonant sounds in neighboring words

Antonym – A word that is the opposite of another word.

Characterization – The method an author uses to reveal characters and their various personalities.

Compare – Place together characters, situations or ideas to show common or differing features in literary selections.

Context Clues – Information from the reading that identifies a word or group of words

Concepts of Print – Print goes left to right; one to one match with voice to print, concept of first and last; concept of letter, word, sentence, space, letter order in words is important; different punctuations have meaning

Conventions of Language – Mechanics, usage and sentence completeness

Decoding – Analyzing text in order to identify and understand individual reading

Echo Reading – Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line

Emergent Literacy – One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy

Expressive Language – Being able to convey messages using words

Evaluate – Examine and judge carefully

Fine Motor – Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay, pinching clothespins

Fluency – The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading

Genre – A category used to classify literary works, usually by form, technique or content (e.g., prose, poetry)

Guided Reading – Teachers work with students at their instructional level to guide them in using context, visual and structural cues

Homophone – One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode)

Language Experience – Reading own writing; teacher takes dictation from students or students do own writing. Use student's own words as reading material; an effective way to encourage self-expression and build awareness of the connections between oral and written language.

Learning Styles – Visual (learn through seeing) needs to see the teacher's body language and facial expression to fully understand the content of the lesson

- Auditory (learn through listening) learns through lectures, discussion and listening and needs to talk things through
- Tactile/kinesthetic (learn through moving and touching) learns best through a hands-on approach actively exploring the physical world around them

Literary/Story Elements – The essential techniques used in literature (characterization, setting, plot, theme, problem, solution)

Literary Devices – Tools used by the author to enliven and provide voice to the writing (e.g., dialogue, alliteration)

Multiple Intelligences – Howard Gardner's theory of intelligences

- Visual – spatial (ability to perceive the visual)
- Verbal-linguistic (ability to use words and language)
- Logical/mathematical (ability to use reason, logic and numbers)
- Bodily/kinesthetic (ability to control body movements and handle objects skillfully)

- Musical/rhythmic (ability to produce/appreciate music, sound, rhythm)
- Interpersonal (ability to relate and understand others; other people's feelings)
- Intrapersonal (ability to self-reflect and be aware of one's inner state of being; self awareness)
- Naturalist (ability to recognize, categorize and draw upon certain features of the environment)

Narrative – A story, actual or fictional, expressed orally or in writing

Onset – A sound in word that comes before the vowel

Phonemic Awareness – Ability to hear and identify parts of spoken language and auditorily divide into phonemes

Phoneme – A sound unit of speech

Phonics – A way of teaching reading that stresses sound symbol relationship; refers to the relationship between the letters and letter sounds of a language

Phonological Awareness – A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables and onsets and rimes

Picture Walk – A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story

Point of view – The way in which an author reveals characters, events and ideas in telling a story; the vantage point from which the story is told

Print Awareness – Ability to understand how print works

Reading Awareness – Uses the language of literacy top, bottom, same, different, etc.)

- Identifies the beginning, middle, and end of a story, with the main idea coming first and details added later
- Demonstrates awareness that language can be written down and read later
- Differentiates between pictures and words
- Shows curiosity about environmental print
- Differentiates between pictures and words

Reading critically – Reading in which a questioning attitude, logical analysis and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria

Receptive Language – Being able to receive and give meaning to message/ words heard

Research – A systematic inquiry into a subject or problem in order to discover, verify or revise relevant facts or principles having to do with that subject or problem

Rime – The part of a syllable that contains vowel and all that follows

Shared Reading – Teacher guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading or fill the gap reading)

Shared Writing – Teacher and learner work together to compose a message or story

Tone – The attitude of the author toward the audience and characters (serious or humorous)

Voice – The fluency, rhythm and liveliness in writing that make it unique to the writer



PARTNERSHIPS FOR LEARNING

FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES



The school experience consists of much more than the academic content that teachers share with students every day. School success is also dependent on children's ability to learn, their interest in learning, and the connections between schools, community agencies and families that enable the child to learn in a way that supports his or her own learning style, needs and home experience. The partnership, links and connections that begin in the early childhood years between teachers and administrators and families, along with the other agencies in which a child or family interacts are critical to providing a holistic and seamless approach to children's learning. Schools and families should work together to share information about individualized learning plans and goals; assure positive transition to and from the current school setting; and identify and refer family members to other community agencies when appropriate.

WONDER AND DELIGHT!

Young children are curious, and from birth, they naturally seek out problems or questions to solve. They use their senses to explore materials and the environment and the search for answers to perceived problems or situations is motivational, holding their attention and creating their enthusiasm for learning. When classrooms or learning environments are structured to promote this curiosity or a sense of wonder and delight, they use instructional strategies that are based on inquiry. Inquiry is the active searching for knowledge and understanding of a specific idea and occurs most successfully when adults' intentionally create activities and experiences that allow children to use previously learned knowledge to understand new information. The adults' role during this active exploration is to scaffold children's thinking by asking "open-ended" questions that encourage problem solving and support children's imagination and story-telling. Open-ended questions or statements such as, "I wonder why that's painted blue" or "If you were Sally, what would you have done?" Allow children to express their thoughts, think creatively and problem solve. They are a more successful choice to encourage learning and critical thinking than closed questions, such as "What color did you choose?" or "Did Sally make a good choice?" that typically result in short answers that don't ask or provide good insight into children's thinking.



Standard	Page
20.1 Connections	74
20.2 Family Engagement	76
20.3 Supporting Children's Learning	77
20.4 Transition	79

STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

BIG IDEA: The relationship between the family and school personnel is a critical foundation to children's success in school.

ESSENTIAL QUESTION: How do schools understand families' home lives, their values, and attitudes towards learning? How do schools incorporate family preferences and interests into the life of the classroom? How do schools assure that families are familiar with and accepting of school values, attitudes and philosophies?

STANDARD STATEMENT

- Offer on-site enrollment meeting where family can meet school personnel and observe the classroom where the child will be attending
- Share family and school routines and discuss any needed accommodations
- Provide and regularly review a Parent Handbook that outlines program expectations and operating details
- Offer parent-teacher school events that provide updates and give families opportunities to participate in school life
- Identify home culture, language, routines, etc. and how they might impact a child's adjustment to school
- Discuss schedules, events or past experiences that may impact a child's school experience
- Share instructional philosophies that help families understand the school structure

THE FAMILY AND SCHOOL TOGETHER

- Participate in introductory enrollment meetings that enable both family and school representatives to share values, attitudes, philosophies about learning along with unique details and needs of the child and family
- Provide a classroom tour for child and family where they can meet the teacher and explore the classroom setting
- Discuss families' needs for drop-off and pick-up, health concerns, and potential language barriers
- Hold a "Back to School" or Open House night
- Talk about a recent event, such as divorce or death, which may impact a child's behavior and what might occur at school as a result; discuss ways to communicate reciprocally about child's adjustment
- Discuss child guidance and management strategies so both family and school understand the similarities and differences in approach
- Talk about previous group experiences and child's reaction – what might be expected on the first few days
- Ask questions to learn about the child's temperament
- Ask child to bring to school pictures of family members, home environment or other important home elements that might make the adjustment to a new school easier
- Support family's apprehensions during the first few weeks of school by calling them on the first day to describe child's adjustment or by inviting the family to stay with the child for increasingly shorter periods of time prior to drop off
- Formulate a survey or questionnaire that can be done orally or in writing to learn about family attitudes and philosophy on child rearing, learning, reading
- Talk about the classroom structure and how children learn through play
- Learn about who the child considers 'family' and how the family defines itself, including extended family members if relevant



STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

20.1.2 HOME TO SCHOOL CONNECTIONS

STANDARD STATEMENT

- Identify family practices and traditions that should be included within the classroom
- Work with families to identify books, songs and finger plays, dances, foods, toys, etc. that should be included in the classroom or school environment; ask for donations
- Learn about the family and home setting and incorporate into the school experience, asking for updates and new information regularly
- Invite family members into the classroom to discuss cultural information with the children, to participate in classroom life, or to identify community locations or businesses that can be visited
- Work with families to determine child's best classroom placement including when to transition from one to the next, personality types, etc.

THE FAMILY AND SCHOOL TOGETHER

- Identify ways to assure the child's positive and comforting entry into a new classroom setting, such as a picture in the cubby, a stuffed animal or blanket
- Encourage volunteers and program participation from cultural groups in the community such as foster grandparents or other multi-generational connections
- Determine if child may eat traditionally served foods, celebrate holidays, etc.
- Use family or culturally specific phrases or words to describe activities or materials
- Ask about family members, calling them by name, such as how is the newborn, how grandpa is doing after return home from hospital, etc.
- Add culturally-specific materials and experiences into the schedule and environment such as adding a wok to the cooking area, or counting in both English and Spanish during morning message
- Invite a family member to teach class a culturally-specific song or to provide the words to the song
- Display family pictures inside and outside the classroom
- Seek out community volunteers to share information about specific events or activities that are meaningful to children
- Invite family members to participate in classroom events, whenever possible
- Serve familiar cultural foods and introduce new traditional foods periodically – such as rigatoni with cheese or bagels and cream cheese
- Encourage children to show pride in family-specific beliefs or practices by showing interest and describing them to the class

20.1.3 SCHOOL TO HOME CONNECTIONS

STANDARD STATEMENT

- Assure that family communications are done in culturally-sensitive ways that accommodate family literacy levels, culture barriers, etc.
- Regularly send home information about the child's growth and progress and adjustment to the school setting
- Discuss the program and classroom operational procedures such as absences, snow delays, payment, etc and learn if there are potential challenges for families, making accommodations as appropriate
- Make available voluntary "at home" activities that families can complete with child, being sensitive to family structure and culture
- Create an "open-classroom" policy where family members can visit or volunteer in the classroom or school
- Where appropriate, complete home visit with family
- Support families' efforts to build the child-child or family-family connection

THE FAMILY AND SCHOOL TOGETHER

- Create videos, picture books and written schedules that depict the classroom daily routine and send home to families as requested
- Ask family members to identify successful accomplishments the child may have completed at home during the week and acknowledge them in school
- Provide connections between school and school activities such "We are learning about caterpillars and read The Very Hungry Caterpillar. Here's green paper and scissors for you to make a caterpillar at home"
- Take a picture of a child at school, such as sitting with a completed block structure or reading a book, and send home to family or email it to family member, "Look what Tamika did today!"
- Disseminate newsletters that highlight key events in the life of the program and the classroom; identify key songs, books and recipes, and clarify a key program expectation
- Post the daily schedule in the parent information area for families to become familiar with the sequence of the day
- Regularly update classroom or program message boards to keep information current and fresh
- Create a classroom web page and provide family members with the link – include a bulletin board or question and answer section that is checked by classroom staff regularly
- Provide opportunities for families to meet each other and connect based on commonalities, such as "Miles' family lives in your neighborhood too" or "Sandy's mom just found out she's going to have a new baby also", being respectful of confidentiality

STANDARD 20.2: FAMILY ENGAGEMENT

BIG IDEA: Children's motivation to learn and succeed in school is impacted by family support and involvement in the life of the program.

ESSENTIAL QUESTION: How do families and schools work together to make decisions about the program? What kinds of school events and activities encourage family participation? How do we assure that information exchange is reciprocal?

20.2.1 SHARED GOVERNANCE OR DECISION-MAKING

STANDARD STATEMENT

- Implement a family-school annual review of program operation
- Develop and update annually a Parent Manual that details operational procedures
- Establish conflict resolution policies that identify procedures for complaints or suggestions
- Post regulations, program requirements, etc. in strategic locations within the school so family members can review it regularly
- Offer training to Advisory or Board on shared governance
- Encourage family members to participate in schoolwide parent-teacher organizations

THE FAMILY AND SCHOOL TOGETHER

- Invite family feedback from classroom observations and share summary of results
- Invite family members to participate in oral interviews about the program experience
- Create a Parent Handbook committee which includes staff, families and community members that annually reviews information and suggests updates as needed
- Develop a joint family-school committee that investigates new state, federal or local initiatives that may impact the school's operation and recommends next steps
- Identify a procedure which includes family members and staff to consider complaints and make recommendations for improvement
- Disseminate parent surveys or interviews to all or a percentage of the clientele which provides feedback about general program operation or about newly instituted policies
- Inform families of ways to share concerns or worries about school policy and develop a review process to handle issues
- Design a Governing Board or Advisory Committee whose members represent families, community agencies and school personnel
- Involve the families in program goal-development and strategic planning

20.2.2 SPECIAL EVENTS AND ACTIVITIES

STANDARD STATEMENT

- Learn families' interest and capacity for participation in specific events such as a holiday party, graduation event, etc.
- Offer family education events such as parenting classes, sign language, health and safety, etc that reflect families' interests and needs
- Incorporate unique cultural events or beliefs into classroom life
- Invite families to plan and implement classroom celebrations

THE FAMILY AND SCHOOL TOGETHER

- Inform families about community cultural events that may be occurring at specific times of the year and determine if/how the event could be expanded into the classroom
- Ask a family to share information about a specific event, such as Chinese New Year, and help you design a related activity
- Within classrooms or programs, come to consensus about how holiday celebrations or birthdays should occur at school
- Create a family resource area that contains books, toys, informational pamphlets, etc that families can access
- Design parent education events that families can do together after work, such as Parents as Teachers workshops, or ways to transition children into kindergarten
- Offer parent nights or events at mutually-agreed upon times, including meals or babysitting when appropriate
- Seek feedback from families to design field trips or big classroom events that may be of particular interest to the children
- Ask families if they'd like to volunteer materials or information about specific cultural events
- Increase awareness by finding locations in the community that will allow children's work to be displayed, such as a library or town hall

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

BIG IDEA: Early childhood programs must work closely with families to support children's development and learning, both at school and at home.

ESSENTIAL QUESTION: How do families and school work together to identify children's skills, interests and long-term and short-term goals for learning? How do I understand families' at-home learning attitudes and strategies? How do I provide individualized and meaningful at-home learning connections to the school experience?

20.3.1 SCREENING AND ASSESSMENT

STANDARD STATEMENT

- Identify screening, assessment and referral processes that include families' involvement
- Utilize screening and assessment instruments that are aligned with the early learning standards
- Assure that children are screened for health, mental health, dental, social-emotional, and cognitive development and the results are shared with families
- Be familiar with community agencies that provide additional screenings or assessments upon referral
- Provide information on child development and parenting that identifies age-appropriate skill development
- Conduct age appropriate baseline and ongoing authentic assessments to identify strengths and areas of focus for future learning and development that are culturally-sensitive, delivered in the language requested by the family and whenever possible, incorporate family feedback
- Utilize multiple sources of evidence to understand individual children's growth and development, including parent report, observations, standardized checklists, etc.

THE FAMILY AND SCHOOL TOGETHER

- Assure families' understanding of the purpose of screening and prepare them for the process, including their input and shared-decisions about referrals when appropriate
- Share initial results of screening and assessment with the family in a way that enables family adults to understand the child's strengths and areas for focus
- Work with family to explain screening and assessment results and identify how they align with home experiences and observations
- Work together to identify referral agencies where needed and support families' contact with them
- Be sensitive to some families' reluctance to act on potential referral or additional evaluation recommendations, periodically re-assessing and discussing until action is taken, if needed
- Collect and share portfolio items with families, asking for at-home contributions as well, that show children's growth and development of specific skills
- Provide information on child development that is written in easy-to-understand language

20.3.2 GOAL DEVELOPMENT

STANDARD STATEMENT

- Use assessment results to lay the framework for understanding individual children's strengths and areas of need
- Share with parents information about each child, including stages of development, interests and assessed skill levels, identifying those that are on track and those that could use additional attention
- Meet periodically to discuss previously determined goals, identify any strengths or improvements and make new decisions about learning goals and activities
- Periodically assess the learning environment and provide activities for age, language and cultural appropriateness and modify as needed

THE FAMILY AND SCHOOL TOGETHER

- At the family-school meeting, both family and teaching adult share information about the child's interests and skills to facilitate joint planning of activities and goals
- Teaching adult shows family the continuum of learning development in the Key Areas of Learning and together they identify where the child falls on the continuum, next steps and whether it should be a specific area of instructional focus
- Family and teacher agree on key skills or attitudes for focus and accommodate each other's interests when appropriate. For example, the family changes math goal expectation from "counting to 100" to "counting to 20," based on learning standards or the teacher adds a math skill since it is important to family even though it wasn't identified in the assessment
- Teaching staff and family talk about ways each goal could be supported at home, identifying basic at-home routines that can be used to "teach", such as counting steps or sorting socks, and the types of intentional instruction that will occur at school
- Classroom personnel praise family interest and participation, helping them to see that they are the young child's primary teacher
- Participate in development and review of child's IFSP or IEP, working with the parent and intervention program to formulate appropriate expectations

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING**20.3.3 ONGOING PROGRESS REVIEW****STANDARD STATEMENT**

- Classroom adults and families should work as a team to review children's goals and progress regularly and to develop new strategies that promote children's successful growth and development
- Classroom staff and families should participate in a minimum of two face to face conferences to discuss children's developmental progress and other pertinent updates
- Offer informal opportunities for family members to converse with classroom adults as needed about children's progress
- Schools should offer a wide variety of materials and ideas that link home and school learning environments, offer information on child development and parenting and support parents' interest and participation in the child's learning process

THE FAMILY AND SCHOOL TOGETHER

- Send home a brief note that identifies growth towards skill mastery such as, "Mary counted to 10 today during circle time!" Read comment to child so s/he feels excited about sharing the note with the family adults
- Schedule a fall and spring conference date, identifying with the family where the conference should occur either home or school, and accommodating families' unique schedules
- Offer notes to families (or other culturally appropriate communication strategies) that help families understand what's occurring in the classroom and how it could link to home, such as "We're going to work on gross motor skills this week with relay races, outside play, and a trip to the park. Take them to the park this week and watch how their skills have grown"
- Identify potential areas of concern for shared focus, "I noticed Sammy was trying really hard to hop on one foot, but was getting frustrated. Have you seen him do that at home? You may want to play some jumping and hopping games like we're doing at school"
- Develop strategies for sharing children's accomplishments. Ask family members to send samples of children's at-home work to school and post or send home classroom samples that help families notice progress
- Remind children how much they're grown, "Remember when you had trouble making the S in your name? Now, look at your name. You've got the S T and E. Way to go!"
- Identify the skills being learned in each activity, helping families to understand the role of play and active learning in the instructional process

20.3.4 COMMUNITY SUPPORTS**STANDARD STATEMENT**

- Identify and understand the services that are provided within the community and identify contacts within each to facilitate collaborative work
- Develop ongoing information-sharing processes with other agencies who work with families
- Create information-sharing processes with other educational or youth activity programs such as the local fitness center, or library
- Develop and honor confidentiality policies regarding information exchange
- Utilize community agency's suggestions to enhance classroom experiences for all children

THE FAMILY AND SCHOOL TOGETHER

- Tell families about special gym classes or music workshops when children show a specific interest or need in those areas, collecting and making available brochures
- Invite a gym instructor into the classroom regularly to help children develop coordination or balance
- Ask the local librarian to provide books and reading activities during an evening parent meeting
- Invite school district personnel to review kindergarten registration and attendance policies with outgoing preschool families
- Work with Early Intervention to assure referrals have been received and child will get evaluations or services as needed
- Incorporate specialists' ideas such as a speech therapist or behavioral therapist into the classroom practice to support all children, including the child with a special need
- Assure confidentiality statements and release of information approvals have been signed prior to information sharing approvals have been signed prior to information sharing

STANDARD 20.4: TRANSITION

BIG IDEA: Schools and families must work together to coordinate information exchange from one setting to another that will assure children's seamless learning experiences.

ESSENTIAL QUESTION: How do I create a seamless transition into and out of the program? What resources and materials do I make available for families to assure at-home learning links with school learning?

20.4.1 PROGRAM ENTRY

STANDARD STATEMENT

- Create processes and procedures for welcoming incoming families through enrollment meetings, sharing of expectations and values, parent handbooks and discussion of sensitive issues that may impact school success
- Identify welcome strategies that excite children and families about their upcoming, new experience
- Establish processes for communicating with sending schools about information sharing
- Develop strategies for communicating with community agencies with which incoming families have been involved for information exchange as well as parent interest in continuing

THE FAMILY AND SCHOOL TOGETHER

- Provide incoming family forms to complete prior to the enrollment visit so they can gather the needed information
- Welcome incoming family by holding an enrollment meeting that reviews the daily schedule, program and classroom expectations, values and philosophies as well as pre-enrollment requirements such as physical, first tuition payment, etc.
- Prior to the child's attendance, learn about the child's interests and display toys or activities that may be especially appealing, display books about the first day of school, post pictures from home, and create activities that will capture the child's interests
- Create orientation books or manuals for both children and adults – "what to expect when you come to school"
- Invite family to visit at least once prior to the first full day, giving children time to meet the teacher and become familiar with the setting
- With parent permission, communicate with sending school about child's past experiences, review screening and assessment results and other information that will support the child and family's move from one school to another
- Wherever possible, use some of the sending school's routines or materials, such as singing the clean-up song or displaying home-made books with pictures of sending school, to ease child's transition into the new situation
- Develop on-going classroom communication between both schools, such as encouraging children to write letters or draw pictures about their new experience and send to the sending school or create "pen pals" between sending and receiving schools
- For children who arrive mid-year, pair up a new child with a child who has been in the program for a while



STANDARD 20.4: TRANSITION**20.4.2 PROGRAM EXIT****STANDARD STATEMENT**

- Develop policies and procedures for transferring information about child's program participation to the next school location
- Help family understand the expectations and schedules of the receiving school, mapping out strategies for success whenever possible
- Work with receiving school to facilitate pen pals, visits, or other activities where the children can become familiar with the new school and stay in touch with the old school
- Set up information-sharing processes with receiving school to discuss child's goals, progress, interests, etc.

THE FAMILY AND SCHOOL TOGETHER

- Meet with receiving schools to identify commonalities between the schools' approaches and convey them to families so they will have some comfort with similar routines and activities
- Establish information-exchange processes between sending and receiving school that provide opportunities for teachers to share successful strategies for learning that will support the transition
- Provide the receiving school with materials or activities that can be used to offer familiarity and comfort during the transition, such as a "treasure hunt" activity or set of questions to answer in the new school or picture books of the sending school
- Display materials from the receiving school that children will recognize when they transition such as a picture book of the new school, classrooms and teachers; talk with children about what to expect
- Send child to new school with a portfolio of completed work – either to keep at home or to share with the school
- Arrange a time to visit child at new school or to call and talk with family after they have left the sending school atmosphere

20.4.3 COMMUNITY CONNECTIONS**STANDARD STATEMENT**

- Identify and include child's participation in other schools or programs on information that is sent to receiving school – in transition
- Develop relationship with local Early Intervention agencies, birth to three and three to five, and create process for information and referral exchange
- Participate in the county Community Engagement Group and other community-collaborative agencies that advocate for early childhood locally and statewide early
- Assure the program's representation at county or community days
- Produce regularly-updated program brochures or promotional materials and distribute throughout the community
- Arrange for information-sharing sessions with local school districts to develop shared expectations for entry and exit into the programs
- Offer early childhood professional development to other community agencies
- Invite community agencies to provide special seminars or workshops for families

THE FAMILY AND SCHOOL TOGETHER

- Develop a transition form that assures transfer of information from sending to receiving school
- Schedule meetings with Early Intervention providers, local Head Start agency, etc. to introduce your school and to discuss collaboration
- Invite local librarian to visit the school to present a story hour. Invite family members
- Register incoming kindergartners at local preschool settings for family convenience and familiarity
- Use field trips to introduce children to nearby agencies and resources that may be tapped or invite community agency representatives to visit the school and read to children or work on activities with small groups
- Meet with local preschools to review their strategies for use of the learning standards in their instruction and develop common ground
- Post a display shelf of community agencies' brochures for family access and/or feature a community agency in the monthly newsletter
- Disseminate state resources such as Kindergarten, Here I Come, Kindergarten, Here I Am and Learning is Everywhere
- Participate in community events that allow school to stay updated on state and local events or create a booth/display for county events
- Join online state list serves to stay current (not everyone might know what these are, thus the clarification)
- Host joint meetings of schools, district, community agencies, etc. to network and talk about community needs
- Offer PQAS standards-based training to other community providers
- Disseminate agency newsletter to community agencies

SOCIAL AND EMOTIONAL DEVELOPMENT

LEARNING ABOUT MYSELF AND OTHERS



All children need early childhood programs that nurture emotional security, positive self concept and respect for others. Children's social and emotional development is strengthened when they have classroom experiences that promote a sense of identity and belonging within an accepting and responsive environment. Teachers support children's self identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self control and interpersonal problem solving, and by encouraging positive approaches to learning and interacting with others.

TEMPERAMENT



Every human being has a unique way of looking and interacting with the world known as temperament. Some of us are reserved or shy; others are outgoing and make friends easily. Some of us enjoy learning new things and others are wary about trying new things or dealing with new situations. These temperament traits influence the way in which a child learns, interacts with others, and expresses himself. Adults need to adapt their teaching practices to match the individualized needs of children and consider how their own temperament affects the way in which important relationships with children are developed and maintained.



Standard

Page

25.1: Self Concept (Identity).....	82
25.2: Self Regulation.....	83
25.3: Pro-Social Relationships with Adults	84
25.4: Pro-Social Relationships with Peers.....	85

STANDARD 25.1: SELF CONCEPT (IDENTITY)

BIG IDEA: Children see themselves as valuable and worthwhile individuals in their homes, classrooms and communities.

ESSENTIAL QUESTIONS: How do I know what my preferences are? How do I develop a positive feeling about myself? How do I grow confident in myself and my abilities?

25.1.1 SELF AWARENESS

STANDARD STATEMENT

- Demonstrate awareness of preferences and communicate them to others
- State complex thoughts and feelings



EXEMPLARS (EXAMPLES)

The learner will:

- Verbalize own needs, likes, and dislikes
- Describe self using several behavioral or physical characteristics, such as "I am 5 and I can skip."
- Differentiate between preferences for self and others, such as "I like to play with blocks and he likes to draw pictures."
- State the types of books s/he likes to read
- Talk about foods, toys, activities s/he likes or dislikes
- Express an opinion or idea about a particular topic
- Suggest games and activities that demonstrate own abilities and preferences e.g. jumping rope, playing soccer

SUPPORTIVE PRACTICES

The adult will:

- Refer to each learner by name
- Display children's artwork at their eye level
- Ask learners to talk about how books relate to their personal experiences
- Involve children in classroom decision-making, inviting them to make choices that demonstrate their preferences, such as asking what, where, when, why questions?
- Encourage journaling or story-writing about preferences and accomplishments
- Listen to and validate children's expressed feelings and interests

25.1.2 UNDERSTANDING EMOTIONS

STANDARD STATEMENT

- Express emotions appropriately, modifying intensity of reaction as needed
- Recognize and label complex feelings

EXEMPLARS (EXAMPLES)

The learner will:

- Tell others when s/he feels frustrated, angry, upset, using appropriate language to describe how s/he is feeling
- Respond with appropriate behavior to changes in the environment or routine
- Adapt to new adults in the school setting
- Use art forms or writing to express feelings or thoughts

SUPPORTIVE PRACTICES

The adult will:

- Model appropriate responses to a variety of situations
- Introduce and use new vocabulary pertaining to feelings
- Read books about children and their feelings and discuss them
- Encourage children to use a variety of ways to express feelings such as drawing, writing, exercise, etc.
- Graph's learners' feelings about certain ideas or topics

25.1.3 COMPETENCE

STANDARD STATEMENT

- Express pride in oneself's and others' accomplishments
- Demonstrate self-direction in choosing a wide range of play and learning activities
- Attempt new activities and experiences with independence

EXEMPLARS (EXAMPLES)

The learner will:

- Initiate the sharing of work and accomplishments with peers and adults at appropriate times.
- Work independently for a short period of time
- Express excitement over a successful project and want others to like it too
- Choose activities, select materials, and carry out tasks

SUPPORTIVE PRACTICES

The adult will:

- Provide, encourage, and support opportunities for autonomy and self direction (centers, job chart)
- Encourage learners to try new activities and tasks
- Praise and encourage learners' efforts and accomplishments
- Encourage learners to praise others' efforts and accomplishments
- Ensure that the environment is safe from cultural or other forms of bias

STANDARD 25.2: SELF REGULATION

BIG IDEA: Children will express feelings, thoughts and needs appropriately to adults and peers.

ESSENTIAL QUESTIONS: How do I express my feelings appropriately? How do I manage my feelings? How do I use healthy strategies to manage my behavior?

25.2.1 EMOTIONAL REGULATION**STANDARD STATEMENT**

- Attempt to independently resolve a problem or conflict
- React appropriately in challenging or unique situations
- Manage most changes in routines and activities with a minimum of guidance and direction
- Understand the consequences of own behavior and its impact on others

EXEMPLARS (EXAMPLES)

The learner will:

- Think twice when angry before hitting or responding inappropriately to a situation
- Maintain composure when not selected (to answer question, be first in line, play game, etc.)
- Ask for help when feeling frustrated instead of ripping up paper or crying
- Separate feelings from actions
- Control compulsive behavior
- Use words rather than actions in difficult situations
- End one activity when asked and move to another
- Seek cooperative solutions to peer conflicts

SUPPORTIVE PRACTICES

The adult will:

- Use non-verbal and verbal interactions that are congruent with feelings
- Utilize logical consequences and guidance practices that support learner self-control
- Allow time for learners to solve their own conflicts with peers, offering guidance and suggestions where needed
- Provide opportunities for dramatic play where learners can practice appropriate responses to difficult situations
- Announce changes to routines and schedules ahead of time, whenever possible

25.2.2 BEHAVIORAL REGULATION**STANDARD STATEMENT**

- Perform self-care tasks independently
- Independently follow rules and routines in classrooms and other settings
- Independently use materials with purpose, safety and respect
- Understand and interpret rules and assure others follow them
- Make transitions between activities upon adult direction
- Demonstrate delayed personal gratification until appropriate time

**EXEMPLARS (EXAMPLES)**

The learner will:

- Persist in self-care activities, such as fastening jacket and tying shoe
- Stop oneself when running in the classroom and walk instead
- Enter classroom and independently, hang up coat and put away book bag
- Line up and stay in line when moving from classroom to another location
- Use materials for correct purpose such as scissors for cutting paper not hair
- Wait turn to show picture or to receive a sticker from teacher
- Remind a child to stop talking while the teacher is talking
- Return materials to shelf after using them

SUPPORTIVE PRACTICES

The adult will:

- Offer activities that support self control, such as stop-start games and block play
- Cue learners so they can bring their work to an end prior to transitioning
- Give specific directions with reasonable expectations and time to comply
- Provide opportunities for learners to play with games that require adherence to simple rules
- Read books about learners' responses to situations and discuss the outcome
- Play "what if..." where learners discuss potential resolution to problems
- Maintain a clean and neat classroom environment and allow learners time to clean up upon completion of activities
- Post a few simple classroom rules
- Introduce new materials or activities by carefully describing appropriate use or response and verify students' understanding

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS**BIG IDEA:** Children will learn to develop healthy relationships through positive adult interactions.**ESSENTIAL QUESTIONS:** How do I learn to trust adults? How do I learn to communicate with my parents and familiar adults?**25.3.1 TRUST****STANDARD STATEMENT**

- Solicit help from adults to accomplish challenging tasks
- Respond, and appropriately question adults' directives for greater understanding
- Engage in reciprocal conversation with familiar and un-familiar adults when appropriate

EXEMPLARS (EXAMPLES)**The learner will:**

- Ask for help when needed to complete a task after independently trying
- Ask for clarification, "do you want me to color this box?"
- Share information about events and happenings at home, "my dad left for a business trip this morning"
- Respond to classroom visitors' questions or directives
- Maintain eye contact for a brief period when talking with adult

SUPPORTIVE PRACTICES**The adult will:**

- Promptly respond to students' requests for help
- Respond quickly to requests for help, giving students cues and time for independent resolution, such as, "try to hold that a different way and see if it will fit now"
- Listen respectfully and with interest to children's stories and situations, asking questions and responding where appropriate
- Whenever possible, provide explanations about changes in routines or schedules
- Invite visitors into the classroom and give children opportunities to engage in interactions with them

**25.3.2 ATTACHMENT****STANDARD STATEMENT**

- Show pleasure when interacting with specific adults
- Separate in some unfamiliar settings when familiar people are nearby

EXEMPLARS (EXAMPLES)**The learner will:**

- Greet teacher with warmth upon arrival each day
- Engage in conversation with familiar adult
- Show interest in other familiar adults' life and experiences
- Adapt to new adults in the school setting
- Notice when adults or students are missing
- Leave classroom to go to the nurse when called

SUPPORTIVE PRACTICES**The adult will:**

- Greet students each day and ask questions about how they're feeling or activities they'll be participating in
- Where possible, model positive interactions with parents, engaging them in conversations with interest
- Provide warnings when possible about adults who will be visiting or no longer attending

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS**BIG IDEA:** Children will learn to develop healthy relationships through positive peer interactions.**ESSENTIAL QUESTIONS:** How do I learn to interact with peers? How do I make friends?**25.4.1 SOCIAL IDENTITY****STANDARD STATEMENT**

- Engage in cooperative learning activities to complete a task
- Initiate play with 2–3 peers during free choice time
- Play cooperatively with 3 or 4 children for sustained periods of time
- Participate in cooperative large group activities with adult guidance
- Engage in games and activities that require adherence to rules

EXEMPLARS (EXAMPLES)**The learner will:**

- Ask others to join in during play
- Ask to join others' play activities
- Work with other children to complete a work task or project such as making a collage to depict a story
- Play simple board games with others, following basic rules
- Participate in group games like dodge ball or relay races
- Engage in dramatic play or block play with others to create scenarios

SUPPORTIVE PRACTICES**The adult will:**

- Arrange the environment so there is space for learners to work together and create cooperative activities for learning
- Provide tasks where children must work together to complete a task or project
- Design cooperative play activities where learners develop skills while problem solving and sharing thoughts and ideas
- Provide simple games or activities that require following basic rules
- Give students opportunities to engage in small group creative play activities
- Provide opportunities where children can select peers to work with to accomplish a task

**25.4.2 RESPECT AND EMPATHY****STANDARD STATEMENT**

- Recognize and label others' feelings
- Seek and accept help from peers
- Initiate sharing and turn-taking when appropriate
- Respect the feelings, rights and belonging of peers
- Engage peers in successful resolution of a problem
- Communicate in respectful ways to peers and adults
- Respect and understand others' differences in comparison to self

EXEMPLARS (EXAMPLES)**The learner will:**

- Notice when others are feeling sad or hurt and tell another, "Johnny doesn't like it when you do that."
- Ask another child to help pass out the materials for a task
- Solve a conflict by talking with the other involved persons, "I'll read this book for 5 minutes and then I'll pass it to you."
- Return a dropped or forgotten object to another, "you dropped your pencil"
- Discuss others' differences matter of factly, "you should use this crayon to match your skin color and I should use this one" or "I have 2 mommies and you have a mom and dad"

SUPPORTIVE PRACTICES**The adult will:**

- Assist and facilitate learners in solving their own conflicts rather than removing a learner and/or the material
- Model nurturing behaviors by performing acts of kindness and helpfulness to other adults and children
- Use classroom management strategies and techniques that promote positive behaviors
- Use a peace table to help children negotiate their own conflicts
- Show visual depictions of children's preferences through graphs or charts such as # children who prefer red or yellow apples
- Partner students with varying levels of competence on specific tasks to work together

RESOURCES

APPROACHES TO LEARNING THROUGH PLAY

- Gonzalez-Mena, Janet. (1997, September 22). The cultural context of infant caregiving The Free Library. (1997). Retrieved August 30, 2009 from [www.thefreelibrary.com/The cultural context of infant caregiving.-a020851400](http://www.thefreelibrary.com/The+cultural+context+of+infant+caregiving.-a020851400)
- Grotberg, Edith H. A Guide to Promoting Resilience in Children: Strengthening the Human Spirit from the Early Childhood Development Practice and Reflections Series, retrieved from <http://resilnet.uiuc.edu/library/grotb95b.html#chapter2>
- McClain, Bonnie. Building Resilience in Children. Healthy Children, Winter 2007. retrieved from <http://www.aap.org/healthychildren/07/winter/bldgresil.pdf>
- National Center for Cultural Competence: Georgetown University Center for Child and Human Development University Center for Excellence in Developmental Disabilities Education
- Research & Service June 1989 – Revised 2002, 2004, & 2005
- Owocki, Gretchen. 2002. Literacy through Play. Portsmouth, NH, Heinemann
- Ritblatt, Shulamit Natan. (2005, March 22). Cultural competence in infant/toddler caregivers: application of a tri-dimensional model The Free Library. (2005). Retrieved August 30, 2009 from [http://www.thefreelibrary.com/Cultural competence in infant/toddler caregivers: application of a...-a0131903279](http://www.thefreelibrary.com/Cultural+competence+in+infant/toddler+caregivers:+application+of+a...-a0131903279)
- Rogers, CS and JK Sawyer. 1988. Play in the Lives of Children
- Rouse, Longo, Trickett. Fostering Resilience in Children, Bulletin #875-99; retrieved 7/09 from [Ohioline.ag.ohio-state.edu](http://ohioline.ag.ohio-state.edu)

CREATIVE THINKING AND EXPRESSION

- Fowler, C. (2001). Strong arts, strong schools: The promising potential and shortsighted disregard of the arts in American schooling. United States: Oxford University Press
- Gardner, H. (1982). Artful scribbles: The significance of children's drawings. Basic Books.
- Isbell, R. & S. Raines. (2002). Creativity and the arts with young children. Delmar Cengage Learning .
- Kellogg, R. (1970) Analyzing children's art. Palo Alto, California: National Press Books.
- Liyan, M. (2007). Smart chart: A parent's guide for raising standards. Kindergarten. Tyler, Texas: Mentoring Minds.
- Lowenfeld, V. & W. Lambert Brittain. (1978). http://www.amazon.com/Creative-Mental-Growth-Viktor-Lowenfeld/dp/0023721103/ref=sr_1_1?ie=UTF8&s=books&qid=1243618552&sr=1-1 Creative and Mental Growth (8th Edition). New York: Macmillan: Collier Macmillan.
- Luehrman, M. & K. Unrath. (2006). Making theories of children's artistic development meaningful for preservice teachers. Art Education, 59(3), 6-12.

MATHEMATICAL THINKING AND TECHNOLOGY

- <http://www.ed.gov/pubs/EarlyMath/index.html> US Department of Education, Office of Educational Research and Improvement
- <http://www.center.edu/> Center for Innovation in Education
- Baroody, A. A Guide to Teaching Mathematics in the Primary Grades. Allyn and Bacon. Boston. 1989.
- Bredenkamp, S. and T. Rosegrant. Reaching Potentials: Transforming Early Childhood Curriculum and Assessment. Vol 2. National Association for the Education of Young Children. Washington, DC. 1995.
- Brewer, JoAnn. Introduction to Early Childhood Education. 2nd Edition. Allyn and Bacon. Boston. 1995.
- Clements, D.H. and M. Battista. Constructivist Learning and Teaching. Arithmetic Teacher. September 1990. pp 3435.
- Clements, Douglas and Julia Sarama (editors), Engaging Young Children in Mathematics Lawrence Erlbaum Association, Mahwah, New Jersey, 2004.
- Copley, Juanita, The Young Child and Mathematics, NAEYC, 2000
- Copley, Juanita, Showcasing Mathematics for the Young Child: Activities for Three-, Four-, and Five-Year-Olds National Council of Teachers of Mathematics, November, 2003.
- Cross, ChristopherT, Taniesha A. Woods and Heidi Schweingruber, Editors: Mathematics Learning in Early Childhood: Paths Toward Excellence and Equity, Committee on Early childhood Mathematics; National Research, 2009.
- Ginsburg, H.P. Children's Arithmetic: How They Learn It and How You Teach It. (2nd edition). Austin, TX: Pro Ed. 1989.
- Kamii, C. Children Reinvent Arithmetic. Teachers College Press. New York. 1985.
- Mokros, J. Beyond Facts and Flash Cards: Exploring Math With Your Kids. Heinemann. Portsmouth, NH. 1996.
- Saracho, Olivia. Right From the Start. Allyn and Bacon. Boston. 1994.
- Shaw, Jean M., Mathematics for Young Children, Southern Early Childhood Association, Little Rock, Arkansas 2005
- Smith, Susan Sperry. Early Childhood Mathematics. Allyn and Bacon. Boston 1997.
- Stenmark, J.K., V. Thompson, and G. Coates. Family Math for Young Children. University of California. 1997.
- Williams, C. and C. Kamii. "How Do Children Learn by Handling Objects?" Young Children. November 1986. pp 2326

SCIENTIFIC THINKING AND TECHNOLOGY

- Lind, K. Dialogue on Early Childhood Science, Mathematics, and Technology Education
- First Experiences in Science, Mathematics, and Technology
- Science in Early Childhood: Developing and Acquiring Fundamental Concepts and Skill <http://www.project2061.org/publications/earlychild/online/experience/lind.htm>
- Pica, R. (2009). Jump into science: Active learning for preschool children. Beltsville, MD: Gryphon House.
- <http://scienceforpreschoolers.com/about>
- Saracho, O. & B. Spodek, Eds. (2008). Contemporary Perspectives on Science and Technology in Early Childhood Education. Charlotte, North Carolina: Information Age Publishing.

SOCIAL STUDIES THINKING

National Association for the Education of Young Children. (1993). Enriching classroom diversity with books for children, in-depth discussion of them and story extension activities. *Young Children*, 48(3), 10–12.

National Council for the Social Studies: www.ncss.org

Smilansky, S. & L. Shefayta. (1990). Facilitating play: A medium for promoting cognitive, socio-emotional and academic development in young children. Gaithersburg, MD: Psychosocial and Education Publications.

HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

Agran, P.F., Winn, D., Anderson, C. Trent, R. & Walton-Haynes, L. (2001). Rates of pediatric and adolescent injuries by year of age. *Pediatrics*, 108, 345.

Bushnell, E.W., & Boudreau, J. P. (1993). Motor development and the mind: The potential role of motor abilities as a determinant of aspects of perceptual development. *Child Development*, 64, 1005–1021.

Marotz, L.R., Cross, M.Z. & Rush, J.M. (2005). Health, safety and nutrition for the young child, 6th ed. Clifton Part, NY: Thompson Delmar Learning.

National Association for Sport and Physical Education (2002). Active start: A statement of physical activity guidelines for children birth to five years. Reston, VA: Author.

National Association for Sport and Physical Education (2004). Moving into the future: National standards for physical education 2nd ed. Reston, VA: Author.

Time Out: Using The Outdoors to Enhance Classroom Performance is available at: <http://www.nwf.org/nwfwebadmin/binaryVault/Time%20Out%20with%20BOT%20Activities1.pdf>

LANGUAGE AND LITERACY DEVELOPMENT

http://www.teach-nology.com/teachers/early_education/subject_matter/language_arts/

<http://www.kidsource.com/schwab/developing.reading.skills.html>– Kid Source Online

<http://www.esl4kids.net/> Resources for young English Language Learners

<http://curry.edschool.virginia.edu/go/wil/home.html> Literacy and Head Start (Webbing into Literacy)

<http://www.ed.gov/pubs/CompactforReading/tablek.html> (US Government ideas for kindergarten)

http://www.ifg-inc.com/Consumer_Reports/LearnToRead.html Helping your child read– (infancy through age 10) ideas for parents from the US Government

http://www.ed.gov/its/americanreads/educators_early.html Early Childhood and Literacy; US Government

<http://www.fcrr.org/> Florida Center for Reading Research (teacher and parent ideas)

Morrow, Lesley Mandel and Elizabeth Brown Asbury, Literacy Activities For Early Childhood Classrooms: Literacy Development in the Early Years: Helping Children Read and Write, Guilford Publishing, 2000 .

Otto, Beverly, Literacy Development in Early Childhood: Reflective Teaching for Birth to Age Eight, Prentice– Hall, 2007.

Otto, Beverly, Language Development in Early Childhood (3rd Edition), Prentice– Hall, February, 2009.

PARTNERSHIPS FOR LEARNING

For more information and for resources to help you design, implement, and evaluate family involvement work, consider making use of the following resources:

Harvard Family Research Project, Harvard Graduate School of Education: Family Involvement in Early Childhood Education, Spring 2006

Rimm–Kaufman, S. E., & Pianta, R. C. (2005). Family–school communication in preschool and kindergarten in the context of a relationship-enhancing intervention. *Early Education and Development*, 16(3), 287–316.

Foster, M. A., Lambert, R., Abbott–Shim, M., McCarty, F., & Franze, S. (2005). A model of home learning environment and social risk factors in relation to children's emergent literacy and social outcomes. *Early Childhood Research Quarterly*, 20(1), 13–36.

Rous, B (2008). Ed.D. Recommended Transition Practices for Young Children and Families. Results from a National Validation Study. Lexington: University of Kentucky, Human Development Institute, National Early Childhood Transition Center.

Cox, M. J. (1999). Making the transition. *Early Developments*, 3 (1), 4–6.

Pianta, R. C. & Cox, M. J. (Eds.) (1999). The transition to kindergarten. Baltimore, MD: Brooks.

Successful Kindergarten Transition, 2003, Your Guide to Connecting Children, Families, and Schools, by Robert C. Pianta, Ph.D., & Marcia Kraft–Sayre, LCSW

School Readiness and the Transition to Kindergarten in the Era of Accountability (Paperback) by Robert C. Pianta (Author, Editor), Kyle L. Snow (Editor), 2007

Ramey, S. L., & Ramey, C. T. (1998). Commentary: The transition to school: Opportunities and challenges for children, families, educators, and communities. *The Elementary School Journal* 98, (4) 293–295.

U.S. Department of Health and Human Services, Administration for Children, Youth and Families, Head Start Bureau. (1996). Effective Transition Practices: Facilitating Continuity: Training Guide for the Head Start Learning Community. AspeOn Systems Corporation.

SOCIAL AND EMOTIONAL DEVELOPMENT

Center for Social and Emotional Foundations for Early Learning, www.vanderbilt.edu/csefel/index.html

CASEL: Collaborative for Academic, Social and Emotional Learning: www.casel.org

James Comer School Development Program
www.schooldevelopmentprogram.org/

Rutgers University Social Emotional Learning Law
www.rci.rutgers.edu/~melias/



ACKNOWLEDGEMENTS

ANN APPOLLONI

Chester County Intermediate Unit

AMY WIBLE

Cen Clear Head Start

BECKY BLAHUS

Office of Child Development and Early Learning

BECKY LEITER

Center for Schools and Communities

BETH FAIRCHILD

Early Intervention Technical Assistance

CAROLYN GALLO

Office of Child Development and Early Learning

HEIDI REHNER

Be At Home Childcare

JACKIE THOMAS

YMCA Pittsburgh

DR. JANE DASCHBACH

Office of Child Development and Early Learning

DR. JEAN DYSZEL

Capital Area Intermediate Unit

JEANNE PREDMORE

South Middleton School District

JO BETH MCKEE

PA Dept of Education

JUDY SADD

LutherCare Child Care

KAREN RUCKER

Zero To Three

KAREN GRIMM THOMAS

PA Head Start Association

KATHY LUFT

Mechanicsburg School District

KATHY MOSELY

Lehigh Carbon Community College

KIRSTY BROWN

Office of Child Development and Early Learning

LAVERNE DAVIS GAY

Head Start Region 3

DR. A. LEE WILLIAMS

Slippery Rock University

LINDA KERN

Pennsylvania Key

LINDA MCMULLEN

Fairfield Area School District

LINDA STUBITZ

Oley Valley SD

LINDSAY KEIFER

Malvern School

LOLITA GRIFFIN

Philadelphia Early Childhood Collaborative

LUCY FLEMING

Alliance for Infants-Toddlers

LYNEICE PARKER-HUNTER

PA Dept of Education

MARNIE JOHNSON

WITF

MAUREEN MURPHY

South Central Regional Key

MEGAN PENSON

York Jewish Community Center

NANCY HILL

Pittsburgh School District

PATTI WIRICK

Early Intervention Technical Assistance

ROBIN ECKERT

Reading Area Comm College

SANDY BUTTON

Bradford-Tioga Head Start

SHELLY OCHTERSKI

Wattsburg School District

SUE MITCHELL

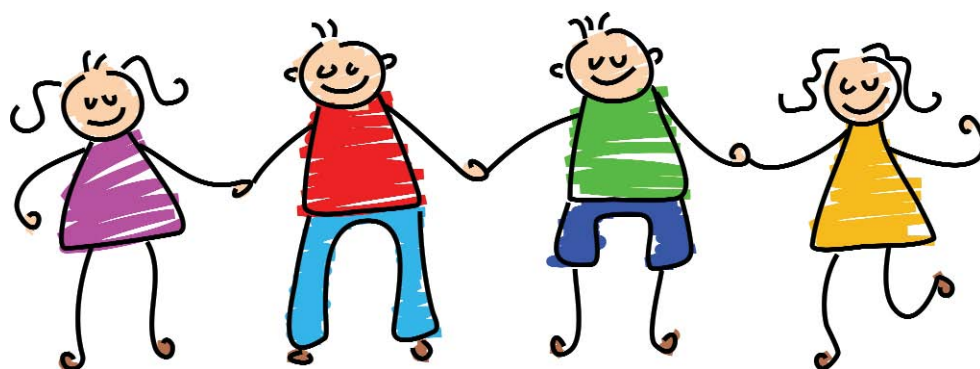
Office of Child Development and Early Learning

TRACY KEYES

Kutztown University

STEPHANIE BOWEN

Cumberland Valley School District





**OFFICE OF CHILD DEVELOPMENT
AND EARLY LEARNING**
PENNSYLVANIA DEPARTMENT OF EDUCATION
AND DEPARTMENT OF PUBLIC WELFARE